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Personal Information

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International Researcher IDs

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Yoksis Researcher ID: 294444

Education Information

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

Postgraduate, Tekirdağ Namik Kemal University, Graduate School Of Natural And Applied Sciences, Kimya/ Biyokimya, Turkey 2012 - 2015

Undergraduate, Tekirdağ Namik Kemal University, Faculty Of Arts And Sciences, Kimya, Turkey 2008 - 2012

Dissertations

Doctorate, Bazı Kardiyovasküler Hastalıkların Biyosensör Sistemleri ile Belirlenmesi ve Gerçek Örneklerde Kullanım Potansiyellerinin Araştırılması, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya / Biyokimya, 2018

Postgraduate, HSP70 in Hassas ve Ekonomik Analizi için Fulleren C60 Temelli bir Biyosensör, Tekirdağ Namik Kemal University, Fen Bilimleri Enstitüsü, Kimya / Biyokimya, 2015

Research Areas

Chemistry, Biochemistry, Natural Sciences

Academic Titles / Tasks

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

Assistant Professor, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2018 - Continues

Academic and Administrative Experience

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

Canakkale Onsekiz Mart University, Mühendislik Fakültesi, 2018 - Continues

Faculty Board Member, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Biyomühendislik, 2020 - 2024

Courses

Doku Mühendisliğindeki Nanobiyoteknolojik Uygulamalar, Postgraduate, 2021 - 2022
Biyoelektrokimya, Postgraduate, 2021 - 2022
Biyomühendislik için Organik Kimya, Undergraduate, 2019 - 2020
Minyatürize Biyogölgeleme Sistemleri, Postgraduate, 2019 - 2020
Enzim Mühendisliği, Undergraduate, 2019 - 2020
Biyomühendisliğe Giriş, Undergraduate, 2019 - 2020
Hücre Biyolojisi, Undergraduate, 2018 - 2019
Çözeltiler Kimyası, Postgraduate, 2018 - 2019

Jury Memberships

Post Graduate, ELEKTROKİMYASAL HE4 İMMÜNOSENSÖRÜNÜN GELİŞTİRİLMESİ, ÇANKIRI KARATEKİN ÜNİVERSİTESİ, July, 2020
Post Graduate, ELEKTROKİMYASAL CA125 İMMÜNOSENSÖRÜNÜN GELİŞTİRİLMESİ, ÇANKIRI KARATEKİN ÜNİVERSİTESİ, July, 2020
Post Graduate, Prunus laurocerasus BİTKİSİNİN KİMYASAL İÇERİĞİNİN BELİRLENMESİ VE ANTİKANSER AKTİVİTE ÖZELLİKLERİNİN GERÇEK ZAMANLI HÜCRE ANALİZ SİSTEMİ İLE İNCELENMESİ, ÇANKIRI KARATEKİN ÜNİVERSİTESİ, June, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An unusual impedimetric biosensor design based on 3-MPDS for highly sensitive detection of AFB1 in food samples**
DEMİRBAKAN B., Köseer N. T., ÖZAY Ö., ÖZAY H., SEZGİNTÜRK M. K.
Food Bioscience, vol.62, 2024 (SCI-Expanded)
- II. **A single-use electrochemical biosensor system for ultrasensitive detection of Aflatoxin B1 in rice, corn, milk, peanut, chili pepper samples**
DEMİRBAKAN B., Köseer N. T., Uzman E., ÖZAY Ö., ÖZAY H., SEZGİNTÜRK M. K.
Journal of Food Composition and Analysis, vol.136, 2024 (SCI-Expanded)
- III. **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)
- IV. **An electrochemical immunosensor based on graphite paper electrodes for the sensitive detection of creatine kinase in actual samples**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.921, 2022 (SCI-Expanded)
- V. **An impedimetric biosensor system based on disposable graphite paper electrodes: Detection of ST2 as a potential biomarker for cardiovascular disease in human serum**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
ANALYTICA CHIMICA ACTA, vol.1144, pp.43-52, 2021 (SCI-Expanded)
- VI. **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)
- VII. **A novel ultrasensitive immunosensor based on disposable graphite paper electrodes for troponin T detection in cardiovascular disease**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
TALANTA, vol.213, 2020 (SCI-Expanded)
- VIII. **A novel electrochemical immunosensor based on disposable ITO-PET electrodes for sensitive**

detection of PAK 2 antigen

DEMİRBAKAN B., SEZGİNTÜRK M. K.

JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.848, 2019 (SCI-Expanded)

- IX. **"A sensitive and disposable indium tin oxide based electrochemical immunosensor for label-free detection of MAGE-1"**, TALANTA, vol.169, pp.163-169, 2017
DEMİRBAKAN B., SEZGİNTÜRK M. K.
TALANTA, vol.169, pp.163-169, 2017 (SCI-Expanded)
- X. **"A novel immunosensor based on fullerene C60 for electrochemical analysis of heat shock protein 70"**, JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.783, pp.201-207, 2016
DEMİRBAKAN B., SEZGİNTÜRK M. K.
JOURNAL OF ANALYTICAL CHEMISTRY, vol.783, pp.201-207, 2016 (SCI-Expanded)
- XI. **Introducing a new method for evaluation of the interaction between an antigen and an antibody: Single frequency impedance analysis for biosensing systems**
Ozcan B., Demirbakan B., Yesiller G., Sezginturk M. K.
TALANTA, vol.125, pp.7-13, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **11-(Triethoxysilyl) Undecanal Agent-Based Biosensor System Using Disposable ITO- PET Electrode for Tumour Necrosis Factor-Alpha Detection**
Demirbakan B.
Hacettepe Journal of Biology and Chemistry, vol.51, no.3, pp.271-281, 2023 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **An ITO-PET-based biosensor system for AFP early detection: process optimization studies**
Kaya A., Yiğit Y., Karyelioğlu D., DEMİRBAKAN B., SEZGİNTÜRK M. K.
33rd International Symposium on Pharmaceutical and Biomedical Analysis, 2 - 06 July 2023
- II. **A novel QTF-based panel system for the detection of Aflatoxin B1**
DEMİRBAKAN B., ÜNAL M. A., ARI F., SEZGİNTÜRK M. K., ÖZKAN S. A.
33rd International Symposium on Pharmaceutical and Biomedical Analysis, 2 - 06 July 2023
- III. **ITO-PET coated electrode-based biosensor system for determination of kidney injury molecule-1**
Ankara E. C., Aras S., DEMİRBAKAN B., SEZGİNTÜRK M. K.
33rd International Symposium on Pharmaceutical and Biomedical Analysis, 2 - 06 July 2023
- IV. **A Highly Sensitive Immunosensor System Based on Benzoquinone for Cardiac Troponin T Detection on ITO-PET Electrode**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
4th EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, 03 November 2022
- V. **A Novel Electrochemical Biosensor Design Based on 3-MPDS for Early Detection of AFB1**
Tarimeri N., DEMİRBAKAN B., ÖZAY H., ÖZAY Ö., SEZGİNTÜRK M. K.
4th EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, 03 November 2022
- VI. **An Ultrasensitive Electrochemical Biosensor System for Selective Detection of Aflatoxin B1 In Real Food Samples**
Uzman E., Tarimeri N., DEMİRBAKAN B., ÖZAY H., ÖZAY Ö., SEZGİNTÜRK M. K.
4th EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, 03 November 2022
- VII. **An Electrochemical Sensor Design for Aflatoxin B1 Detection Based on Single-use ITO-PET Electrode Modified with 3-APTES Agent**
Uzman E., Tarimeri N., DEMİRBAKAN B., ÖZAY H., ÖZAY Ö., SEZGİNTÜRK M. K.
5th International Congress on Biosensors, 21 September 2022

- VIII. **A novel immunosensor system based on polyvinyl alcohol modified disposable graphite paper electrodes for sensitive detection of a cardiac biomarker**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.1
- IX. **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
- X. **Design of an electrochemical biosensor system for Suppression of Tumorigenicity 2 detection based on fullerene C60 modified disposable Graphite Paper electrode**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
Euroanalysis 2019, İstanbul, Turkey, 1 - 05 September 2019, vol.1, pp.1
- XI. **A novel single-use graphite paper electrode based electrochemical immunosensor for highly sensitive and repeatable detection of Troponin T**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, vol.1, pp.1
- XII. **A sensitive novel electrochemical biosensor based on a silane agent modified disposable electrodes for cardiovascular disease biomarker**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.1
- XIII. **A novel silanization agent based biosensor system: Analytical studies of a regenerative Melanoma Antigen-1 immunosensor by disposable indium tin oxide electrodes**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
1st International Congress on Analytical and Bioanalytical Chemistry, Antalya, Turkey, 27 - 30 March 2019, pp.1
- XIV. **A novel electrochemical biosensor based on screen printed gold electrode modified with organo-silane for the tumor necrosis factor receptor-associated protein 1 detection**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
12th BBMEC Workshop on International Biosensor Conference, Roma, Italy, 25 - 29 September 2017, pp.1
- XV. **Label-free electrochemical immunosensor for detection of tumor necrosis factor- α based on indium tin oxide**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
3rd International Congress On Biosensors, Ankara, Turkey, 5 - 07 October 2016, pp.1
- XVI. **A novel high reproducible, regenerative, sensitive and cheap biosensor developed by using 3-cyanopropyl trimethoxysilane for PAK2 detection**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016, pp.1
- XVII. **HSP70 tayini için Fulleren C60 temelli bir biyosensör ve karakterizasyon çalışmaları**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
27.Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015, pp.1
- XVIII. **A high sensitive and reproducible immunosensor based on indium tin oxide and silane chemistry**
DEMİRBAKAN B., SEZGİNTÜRK M. K.
2nd INTERNATIONAL BIOSENSOR CONGRESS, İzmir, Turkey, 10 - 12 June 2015, pp.1
- XIX. **A novel immunosensor based on fullerene C60 for elektrochemical analysis of heat shock protein**
DEMİRBAKAN 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**
DEMİRBAKAN B., Özcan B., SEZGİNTÜRK M. K., Yeşiller Ş. G., karaboğa sonuç m. n.
BIOMED 2013, Aydın, Turkey, 12 - 15 November 2013, pp.1

Supported Projects

DEMİRBAKAN B., Tarimeri Köseer N., SEZGİNTÜRK M. K., Project Supported by Higher Education Institutions, Hormon tayini için biyoalgılama sistemlerinin geliştirilmesi, 2023 - Continues

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

DEMİRBAKAN B., BAYGIN B. N., SEZGİNTÜRK M. K., Project Supported by Higher Education Institutions, Kreatin kinaz tayini için tek kullanımlık elektrokimyasal immunosensör geliştirilmesi, 2022 - 2023

DEMİRBAKAN B., Tarimeri Köseer N., SEZGİNTÜRK M. K., ÖZAY H., ÖZAY Ö., TARIMERİ N., Project Supported by Higher Education Institutions, Gıdalardaki Aflatoksin Varlığının Tayinine Yönelik Kullanat Biyoalgılama Sistemlerinin Geliştirilmesi Ve Uygulamaları, 2020 - 2023

TÜBA Project, -Lenf kanserinin teşhisi için pratik, ekonomik, hassas ve taşınabilir immunosensör dizaynı ve çip teknolojisine entegrasyonu, 2016 - 2018

SEZGİNTÜRK 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

Metrics

Publication: 32
Citation (WoS): 116
Citation (Scopus): 131
H-Index (WoS): 6
H-Index (Scopus): 6