

# Dr.Öğr.Üyesi Ceyhun Ekrem KIRIMLI

## Kişisel Bilgiler

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## Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: H-4647-2016

ScopusID: 55595592500

Yoksis Araştırmacı ID: 250813

## Eğitim Bilgileri

Doktora, Drexel University, School Of Biomedical Engineering Science And Health Systems, Amerika Birleşik Devletleri  
2008 - 2014

Yüksek Lisans, Boğaziçi Üniversitesi, Biyomedikal Mühendisliği Enstitüsü, Biyomedikal Mühendisliği (YI) (Tezli), Türkiye  
2005 - 2008

Lisans, Boğaziçi Üniversitesi, Fen-Edebiyat Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, Türkiye 1999 - 2005

## Sertifika, Kurs ve Eğitimler

Diğer, Mastering Quantum Mechanics, Massachusetts Institute of Technology, 2015

Diğer, Introduction to Linear Models and Matrix Algebra, Harvard University, 2015

Diğer, Statistics and R for the Life Sciences, Harvard University, 2015

Diğer, Embedded Systems - Shape the World, The University of Texas at Austin, 2015

Diğer, Electronic Interfaces: Bridging the Physical and Digital Worlds, University of California, Berkeley, 2015

## Yaptığı Tezler

Doktora, In situ detection of transrenal gene mutations without DNA isolation and amplification using Array Piezoelectric Plate Sensor (PEPS), Drexel University, School Of Biomedical Engineering Science And Health Systems, 2013

Yüksek Lisans, Working memory performance assessment while monitoring the prefrontal cortex hemodynamics by means of functional near infrared spectroscopy, Boğaziçi Üniversitesi, Biyomedikal Mühendisliği Enstitüsü, Biyomedikal Mühendisliği (YI) (Tezli), 2008

## Akademik Unvanlar / Görevler

Dr.Öğr.Üyesi, Acibadem Mehmet Ali Aydınlar Üniversitesi, Mühendislik ve Doğa Bilimleri Fakültesi, Biyomedikal Mühendisliği Bölümü, 2016 - Devam Ediyor

Öğretmen, Drexel University, School of Biomedical Engineering Science and Health Systems, 2008 - 2013

Araştırma Görevlisi, Drexel University, School Of Biomedical Engineering Science And Health Systems, 2008 - 2013

## **Verdiği Dersler**

Point of Care Technologies, Lisans, 2022 - 2023  
Technical Drawing, Lisans, 2021 - 2022  
Biosensors, Lisans, 2021 - 2022, 2020 - 2021  
Senior Design 1, Lisans, 2022 - 2023  
Bio-Microelectromechanic Systems, Yüksek Lisans, 2022 - 2023, 2021 - 2022  
Biosensors, Yüksek Lisans, 2021 - 2022, 2020 - 2021, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Senior Design, Lisans, 2021 - 2022  
Biosensors, Lisans, 2020 - 2021  
Senior Design I, Lisans, 2021 - 2022  
Point of Care Technologies, Lisans, 2021 - 2022, 2018 - 2019, 2017 - 2018  
Bio-Microelectromechanical Systems, Lisans, 2020 - 2021  
Human Anatomy and Physiology, Lisans, 2016 - 2017

## **Yönetilen Tezler**

Kirimli C. E., GÖK Ö., Design of DNA-Hydrogel Based Quartz Crystal Microbalance, Yüksek Lisans, M.CANSU(Öğrenci), 2020

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

- I. **A Novel Peptide-Based Detection of SARS-CoV-2 Antibodies**  
Bulut A., Temur B. Z., Kirimli C. E., Gok Ö., Balcioglu B. K., Ozturk H. U., Uyar N. Y., Kanlidere Z., Kocagoz T., Can Ö. BIOMIMETICS, cilt.8, sa.1, 2023 (SCI-Expanded)
- II. **Rapid, label-free genetic detection of enteropathogens in stool without genetic isolation or amplification**  
Han S., SOYLU M. Ç., KIRIMLI C. E., Wu W., Sen B., Joshi S. G., Emery C. L., Au G., Niu X., Hamilton R., et al. BIOSENSORS & BIOELECTRONICS, cilt.130, ss.73-80, 2019 (SCI-Expanded)
- III. **In situ, amplification-free double-stranded mutation detection at 60 copies/ml with thousand-fold wild type in urine**  
Kirimli C. E., Lin S., Su Y., Shih W., Shih W. Y. BIOSENSORS & BIOELECTRONICS, cilt.119, ss.221-229, 2018 (SCI-Expanded)
- IV. **Piezoelectric Plate Sensor (PEPS) for Analysis of Specific KRAS Point Mutations at Low Copy Number in Urine Without DNA Isolation or Amplification**  
Kirimli C. E., Shih W., Shih W. Y. BIOSENSORS AND BIODETECTION: METHODS AND PROTOCOLS, VOL 2: ELECTROCHEMICAL, BIOELECTRONIC, PIEZOELECTRIC, CELLULAR AND MOLECULAR BIOSENSORS, 2ND EDITION, cilt.1572, ss.327-348, 2017 (SCI-Expanded)
- V. **Amplification-free in situ KRAS point mutation detection at 60 copies per mL in urine in a background of 1000-fold wild type**  
Kirimli C. E., Shih W., Shih W. Y. ANALYST, cilt.141, sa.4, ss.1421-1433, 2016 (SCI-Expanded)
- VI. **Specific in situ hepatitis B viral double mutation (HBVDM) detection in urine with 60 copies ml(-1) analytical sensitivity in a background of 250-fold wild type without DNA isolation and amplification**  
Kirimli C. E., Shih W., Shih W. Y. ANALYST, cilt.140, sa.5, ss.1590-1598, 2015 (SCI-Expanded)
- VII. **DNA hybridization detection with 100 zM sensitivity using piezoelectric plate sensors with an improved noise-reduction algorithm**

- Kirimli C. E., Shih W., Shih W. Y.  
ANALYST, cilt.139, sa.11, ss.2754-2763, 2014 (SCI-Expanded)
- VIII. **Real-time, in situ DNA hybridization detection with attomolar sensitivity without amplification using (pb(Mg1/3Nb2/3)O-3)(0.65)-(PbTiO3)(0.35) piezoelectric plate sensors**  
Wu W., Kirimli C. E., Shih W., Shih W. Y.  
BIOSENSORS & BIOELECTRONICS, cilt.43, ss.391-399, 2013 (SCI-Expanded)
- IX. **Temperature- and flow-enhanced detection specificity of mutated DNA against the wild type with reporter microspheres**  
Kirimli C. E., Shih W., Shih W. Y.  
ANALYST, cilt.138, sa.20, ss.6117-6126, 2013 (SCI-Expanded)

## Düger Dergilerde Yayınlanan Makaleler

- I. **A Comparison of Impedance and Antenna Analyzers on the Basis of Machine Learning Assisted Limit of Detection Experiments**  
Kirimli E. E., Kirimli C. E.  
2022-International Workshop on Impedance Spectroscopy (IWIS), cilt.1, sa.1, ss.61-65, 2022 (Düzenli olarak gerçekleştirilen hakemli kongrenin bildiri kitabı)
- II. **Machine learning approach to optimization of parameters for impedance measurements of Quartz Crystal Microbalance to improve limit of detection**  
KIRIMLI C. E., Elgun E. E., Unal U.  
Biosensors and Bioelectronics: X, cilt.10, 2022 (Scopus)

## Kitap & Kitap Bölümleri

- I. **Piezoelectric Plate Sensor (PEPS) for Analysis of Specific KRAS Point Mutations at Low Copy Number in Urine Without DNA Isolation or Amplification**  
KIRIMLI C. E., Shih W. H., Shih W. Y.  
Biosensors and Biodetection Methods and Protocols, Volume 2: Electrochemical, Bioelectronic, Piezoelectric, Cellular and Molecular Biosensors, Ben Prickril, Avraham Rasooly, Editör, Humana Press, New York, NY, New-York, ss.327-348, 2019

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **A Comparison of Impedance and Antenna Analyzers on the Basis of Machine Learning Assisted Limit of Detection Experiments**  
KIRIMLI C. E., KIRIMLI E. E.  
International Workshop on Impedance Spectroscopy (IWIS), Chemnitz, Almanya, 27 - 30 Eylül 2022, ss.61-65
- II. **Performance Comparison Of 2 Different Battery Powered Mobile Antenna Analyzers And One Dedicated Mobile Open Source Qcm Platform**  
Kirimli C. E., Bulut A.  
2. Biyomedikal Mühendisliğinde Yenilikler Kongresi, İzmir, Türkiye, 18 - 19 Eylül 2020, ss.1-5
- III. **Wireless Readout System Modeling for Electrodeless QCM**  
Sari A., Batur O. Z., Kirimli C. E.  
16th International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (SMACD), Lausanne, İsviçre, 15 - 18 Temmuz 2019, ss.149-152
- IV. **"Do It Yourself" Peristaltic Pump and Flowcell for QCM Biosensor**  
Cetin I., Yilmaz G., Halilibrahimoglu H., Kirimli C. E.

## Bilimsel Hakemlikler

TÜBİTAK Projesi, 1001 - Bilimsel ve Teknolojik Araştırma Projelerini Destekleme Programı, Burdur Mehmet Akif Ersoy Üniversitesi, Türkiye, Kasım 2022

TÜBİTAK Projesi, 1001 - Bilimsel ve Teknolojik Araştırma Projelerini Destekleme Programı, Aksaray Üniversitesi, Türkiye, Kasım 2022

TÜBİTAK Projesi, 1001 - Bilimsel ve Teknolojik Araştırma Projelerini Destekleme Programı, Fatih Sultan Mehmet Vakıf Üniversitesi, Türkiye, Kasım 2022

RSC ADVANCES, SCI Kapsamındaki Dergi, Ağustos 2022

RSC ADVANCES, SCI Kapsamındaki Dergi, Haziran 2022

## Metrikler

Yayın: 16

Atıf (WoS): 74

Atıf (Scopus): 77

H-İndeks (WoS): 6

H-İndeks (Scopus): 6

## Kongre ve Sempozyum Katılımı Faaliyetleri

TIPTEKNO 2017, Davetli Konuşmacı, Trabzon, Türkiye, 2017

## Burslar

2224-A Yurt Dışı Bilimsel Etkinliklere Katılma Desteği Programı, TÜBİTAK, 2022 - 2022