

Assoc. Prof. DİDEM GİRAY DİLGİN

Personal Information

Email: didemgiray@comu.edu.tr

Web: <https://avesis.comu.edu.tr/838>

International Researcher IDs

ORCID: 0000-0002-3487-3470

ScopusID: 36547673600

Yoksis Researcher ID: 125050

Education Information

Doctorate, Ege University, Fen Bilimleri Enstitüsü, Kimya Anabilim Dalı, Turkey 2007 - 2014

Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Kimya Anabilim Dalı, Turkey 2001 - 2004

Undergraduate, Ege University, Faculty Of Science, Kimya Bölümü, Turkey 1996 - 2000

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Fotoelektrokatalitik Sistemler İçin Redoks mediyatörleriyle Modifiye Elektrotların Hazırlanması ve Uygulamaları, Ege University, Fen Bilimleri Enstitüsü, Kimya Anabilim Dalı, 2014

Postgraduate, UV ile Bozundurulmuş Sirke Örneklerinde Potansiyometrik Sıtırma Yöntemi İle Ağır Metal Analizleri , Ege University, Fen Biimleri Enstitüsü, Kimya Anabilim Dalı, 2004

Research Areas

Chemistry, Analytical Chemistry, Electromagnetic Methods, Natural Sciences

Academic Titles / Tasks

Associate Professor, Canakkale Onsekiz Mart University, Eğitım Fakültesi, Matematik Ve Fen Bilimleri Eğitimi Bölümü, 2017 - Continues

Lecturer PhD, Canakkale Onsekiz Mart University, Biga Meslek Yüksekokulu, Teknik Programlar, 2010 - 2017

Academic and Administrative Experience

Head of Department, Canakkale Onsekiz Mart University, Eğitım Fakültesi, Matematik Ve Fen Bilimleri Eğitimi, 2023 - 2025

Supervised Theses

Giray Dilgin D., Bir antiparkinson ilaç etken maddesi olan Entakapon'un kalem grafit elektrotla elektrokimyasal tayini, Postgraduate, K.VURAL(Student), 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **An application of a disposable electrode for the sensitive, selective, and cost-effective voltammetric determination of antiparkinsonism drug entacapone based on both its oxidation and reduction**
Vural K., GİRAY DİLGİN D., DİLGİN Y.
Journal of Solid State Electrochemistry, 2025 (SCI-Expanded)
- II. **Highly sensitive voltammetric determination of the fungicide fenhexamid using a cost-effective and disposable pencil graphite electrode**
Erşan T., GİRAY DİLGİN D., ORAL A., Skrzypek S., Brycht M., DİLGİN Y.
Microchimica Acta, vol.191, no.12, 2024 (SCI-Expanded)
- III. **Simple, sensitive, and cost-effective voltammetric determination of salbutamol at a pencil graphite electrode modified with Nafion and functionalized multi-walled carbon nanotubes**
Giray Dilgin D., Vural K., Karakaya S., Dilgin Y.
Monatshefte fur Chemie, vol.155, no.2, pp.143-153, 2024 (SCI-Expanded)
- IV. **Voltammetric Determination of Favipiravir Used as an Antiviral Drug for the Treatment of Covid-19 at Pencil Graphite Electrode**
Ersan T., GİRAY DİLGİN D., Kumrulu E., Kumrulu U., DİLGİN Y.
ELECTROANALYSIS, vol.35, no.4, 2023 (SCI-Expanded)
- V. **Voltammetric determination of Molnupiravir used in treatment of the COVID-19 at magnetite nanoparticle modified carbon paste electrode**
Vural K., KARAKAYA S., GİRAY DİLGİN D., GÖKÇEL H. İ., DİLGİN Y.
Microchemical Journal, vol.184, 2023 (SCI-Expanded)
- VI. **Electrocatalytic oxidation of NADH using a pencil graphite electrode modified with quercetin**
DİLGİN Y., KIZILKAYA B., Dilgin D., GÖKÇEL H. İ., Gorton L.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.102, pp.816-821, 2013 (SCI-Expanded)
- VII. **Electrocatalytic Oxidation of NADH Using a Pencil Graphite Electrode Modified with Hematoxylin**
DİLGİN Y., Ertek B., KIZILKAYA B., Dilgin D. G., GÖKÇEL H. İ.
SCIENCE OF ADVANCED MATERIALS, vol.4, no.9, pp.920-927, 2012 (SCI-Expanded)
- VIII. **Electrocatalytic oxidation of sulphide using a pencil graphite electrode modified with hematoxylin**
DİLGİN Y., KIZILKAYA B., Ertek B., Isik F., Dilgin D.
SENSORS AND ACTUATORS B-CHEMICAL, vol.171, pp.223-229, 2012 (SCI-Expanded)
- IX. **Amperometric determination of sulfide based on its electrocatalytic oxidation at a pencil graphite electrode modified with quercetin**
DİLGİN Y., KIZILKAYA B., Ertek B., Erena N., Dilgin D.
TALANTA, vol.89, pp.490-495, 2012 (SCI-Expanded)
- X. **Electrochemical behaviour of 5-benzyl-4-(4'-methylphenyl)-4H-1,2,4-triazole-3-thiol by voltammetry**
Dilgin Y., KOPARIR M., CETIN A., CANSIZ A., Yilmaz S., GIRAY D.
JOURNAL OF THE INDIAN CHEMICAL SOCIETY, vol.84, no.10, pp.1024-1025, 2007 (SCI-Expanded)

Books

- I. **Chapter 7 - Quantum dots-based photoelectrochemical sensors and biosensors**
Dilgin Y., Karakaya S., Giray Dilgin D.
in: Electroanalytical Applications of Quantum Dot-Based Biosensors - Micro and Nano Technologies, Bengi Uslu, Editor, Elsevier Science, Oxford/Amsterdam , Oxford, pp.209-269, 2021
- II. **Enzyme-Based Photoelectrochemical Biosensors**

DİLGİN Y., GİRAY DİLGİN D.

in: Book Series:50th Year of Hacettepe University Smart Biosensing Technologies: Past Present and Future, Adil DENİZLİ, ArzumERDEM GÜRSAN and Mustafa kemal SEZGİNTÜRK, Editor, Hacettepe University-Palme Yayıncılık, pp.70-100, 2019

Papers Published in Refereed Scientific Meetings

- I. **ELECTROCHEMICAL DETERMINATION OF ENTACAPONE, AN ANTIPARKINSON DRUG ACTIVE INGREDIENT, USING PENCIL GRAPHITE ELECTRODE**
Vural K., Giray Dilgin D., Dilgin Y.
12th Aegean Analytical Chemistry Days, İstanbul, Turkey, 19 - 22 October 2023, pp.41-42
- II. **Sensitive Voltammetric Determination of Salbutamol at Nafion and fMWCNT Modified Disposable Pencil Graphite Electrode**
Giray Dilgin D., Vural K., Karakaya S., Dilgin Y.
26th Congress of the Society Chemists and Technologists of Macedonia, Ohrid, Macedonia, 20 - 23 September 2023, pp.123
- III. **ELECTROCHEMICAL SENSORS FOR DETERMINATION OF ENVIRONMENTALLY IMPORTANT COMPOUNDS USING DISPOSABLE PENCIL GRAPHITE ELECTRODES (Oral Presentation)**
Dilgin Y., Ayaz S., Emir G., Karakaya S., Giray Dilgin D.
22nd International Scientific Conference "EcoBalt 2021", Riga, Latvia, 21 - 23 October 2021, pp.39
- IV. **Chemically modified disposable electrodes as amperometric sensors and biosensors in flow injection analysis (Oral Presentation)**
Ayaz S., Emir G., Giray Dilgin D., Karakaya S., Dilgin Y.
3rd International Congress on Analytical and Bioanalytical Chemistry, Elazığ, Turkey, 22 - 26 March 2021, pp.25
- V. **Flow Injection Amperometric Detection of Formaldehyde at Bimetal Nanoparticles Modified Pencil Graphite Electrodes (Oral Presentation)**
Giray Dilgin D., Emir G., Ayaz S., Karakaya* S., Dilgin Y.
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.82
- VI. **An Enzyme Free Flow Injection Amperometric Glucose Biosensor Using a Cu Nanoparticle Modified Pencil Graphite Electrode (Oral Presentation)**
AYAZ* S., EMİR G., KARAKAYA S., GİRAY DİLGİN D., DİLGİN Y.
4th International Congress on Biosensors, Çanakkale, Turkey, 8 - 11 July 2019, pp.109
- VII. **Flow Injection Amperometric Sensor for the Determination of Formaldehyde based on its electrocatalytic Oxidation at Cu Nanoparticles Modified Graphite Pencil Electrode**
GİRAY DİLGİN D.
1st International Congress on Analytical and Bioanalytical Chemistry (1st ICABC 2019), Antalya, Turkey, 27 - 30 March 2019
- VIII. **Electrochemical Sensors/Biosensors Using Nanomaterials/Polymer Modified Pencil Graphite Electrodes**
GİRAY DİLGİN D., DİLGİN Y.
II. International Joint Science Congress of Materials and Polymers ISCMP ALBANIA 2018 s, 9 - 12 November 2018
- IX. **Developments and applications in enzyme based photoelectrochemical biosensors**
DİLGİN Y., GİRAY DİLGİN D.
8th Black Sea Basin Conference on Analytical Chemistry (8th BBCAC), İstanbul, Turkey, 9 - 11 May 2018
- X. **A New Flow Cell for Pencil Graphite Electrode and Its Using Biosensing of Glucose in FIA System**
GİRAY DİLGİN D., DİLGİN Y.
1st European 10th German BioSensor Symposium, Potsdam, Germany, 20 - 23 March 2017
- XI. **Differential Pulse Voltammetric Determination of Calcium Dobesilate Using a Pencil Graphite Electrode**

GİRAY DİLGİN D.

10th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016

- XII. **Kalem Grafit Elektrot ile Acyclovir'in Voltammetrik Tayini**
GİRAY DİLGİN D., KARAKAYA S.
8. ULUSAL ANALİTİK KİMYA KONGRESİ, Isparta, Turkey, 30 May - 03 June 2016, pp.71
- XIII. **Fotoelektrokimyasal Sensörler ve Biyosensörler**
DİLGİN Y., GİRAY DİLGİN D., Gökçel H. İ., Dursun Z., Nişli G.
4. Ulusal Uygulamalı Elektrokimya Lisansüstü Yaz Okulu ve Çalıştayı, Manisa, Turkey, 24 - 27 May 2016, pp.270-299
- XIV. **Photoelectrochemical Glucose Biosensor In Flow Injection Analysis System Using Poly Hematoxylin Modified Glassy Carbon Electrode**
GİRAY DİLGİN D., GÖKÇEL H. İ.
9th Aegean Analytical Chemistry Days, Chios, Greece, 29 September - 02 October 2014
- XV. **Poli-Azure A Modifiye Kalem Grafit Elektrot ile Akışa Enjeksiyon Analiz Sisteminde NAD⁺/NADH Redoks Çiftine Bağlı Biyosensör Tasarımı**
GİRAY DİLGİN D., Ertek B., SEZGİNTÜRK M. K., DİLGİN Y.
7. Ulusal Analitik Kimya Kongresi, Kahramanmaraş, Turkey, 1 - 05 September 2014, pp.57
- XVI. **Electropolymerized methylene blue-modified pencil graphite electrode for glucose biosensor in flow injection analysis**
SEZGİNTÜRK M. K., DİLGİN Y., GİRAY DİLGİN D., Ertek B.
I.Ulusal Biyosensör Kongresi, Tekirdağ, Turkey, 22 - 26 June 2014, pp.1
- XVII. **Fotoelektrokatalitik Sistemler ve Sensör Uygulamaları**
DİLGİN Y., GİRAY DİLGİN D., Gökçel H. İ., Durusn Z., Nişli G.
III. Ulusal Uygulamalı Elektrokimya Lisansüstü Yaz Okulu ve Çalıştayı,, Balıkesir, Turkey, 3 - 07 June 2014, pp.301-317
- XVIII. **"Electrocatalytic oxidation of NADH at poly-neutral red modified pencil graphite electrode.**
Çakın A., Giray Dilgin D., Dilgin Y.
10th International Electrochemistry Meeting in TURKEY,, Konya, Turkey, 4 - 08 September 2013, pp.139
- XIX. **Amperometric Determination of Sulphide depend on its electrocatalytic oxidation at apencil graphite electrode modified with quercetin**
ERTEK B., ERAN N., DİLGİN Y., KIZILKAYA B., GİRAY DİLGİN D., GİRAY DİLGİN D.
9th International Electrochemsitry Meeting in TURKEY, 25 - 29 September 2011
- XX. **Electrocatalytic Oxidation of NADH using a pencil graphite electrode modified with quercetin**
DİLGİN Y., KIZILKAYA B., GİRAY DİLGİN D., Gökçel H., Gorton .
9th International Electrochemsitry Meeting in Turkey, İzmir, Turkey, 25 - 29 September 2011, pp.123
- XXI. **Azin türü boyar maddelerle modifiye edilmiş elektrotlar kullanılarak NADH ye bağlı biyosensör yapımı**
GİRAY DİLGİN D., Gökçel H. İ., Ertek B., DİLGİN Y.
I. Ulusal Kimya Öğrenci Kongresi, Bursa, Turkey, 7 - 10 April 2010, pp.14-19
- XXII. **Metilen yeşili-modifiye camımsı karbon elektrot kullanılarak NADH nin fotoelektrokatalitik yükseltgenmesi,**
GİRAY DİLGİN D., Gökçel H. İ., Ertek B., DİLGİN Y.
I. Ulusal Kimya Öğrenci Kongresi, Bursa, Turkey, 7 - 10 April 2010, pp.73-76
- XXIII. **Photoelectrocatalysis of NADH at a poly-neutral red/glassy carbon electrode**
GİRAY DİLGİN D., Gökçel H. İ., Dursun Z., DİLGİN Y., Gligor D. M.
8th International Electrochemistry Meeting, Antalya, Turkey, 8 - 11 October 2009, pp.47
- XXIV. **Photoelectrocatalytic oxidation of NADH at a poly-methylene blue modified glassy carbon electrode**
Bayrak B., Ertek B., GİRAY DİLGİN D., Gökçel H., KIZILKAYA B., DİLGİN Y.
8th International Electrochemistry Meeting, Antalya, Turkey, 8 - 11 October 2009, pp.207
- XXV. **Modifiye Elektrotlarla NADH'nin Fotoelektrokatalitik Yükseltgenmesi**
DİLGİN Y., GİRAY DİLGİN D., Gligor D. M., Gorton L.
IV. Ulusal Analitik Kimya kongresi,, Elazığ, Turkey, 25 - 27 June 2008, pp.13

XXVI. Electropolymerization of hematoxylin for electrocatalytic oxidation of NADH

DİLGİN Y., KAYA İ., GİRAY DİLGİN D., Gökçel H. İ., Dursun Z.

6th Aegean Analytical Chemistry Days, Denizli, Turkey, 9 - 12 October 2006, pp.124

Supported Projects

GİRAY DİLGİN D., Yücel F., Project Supported by Higher Education Institutions, Önemli bir Pestisit Olan Paraoxon Etilin Grafit Kalem Elektrotla Elektrokimyasal Tayini, 2023 - Continues

GİRAY DİLGİN D., Vural K., Project Supported by Higher Education Institutions, Bir antiparkinson ilaç etken maddesi olan Entakaponun kalem grafit elektrotla elektrokimyasal tayini, 2022 - Continues

Giray Dilgin D., Ayaz S., Dilgin Y., TUBITAK Project, 2025 - 2026

Giray Dilgin D., TUBITAK Project, 2024 - 2025

GİRAY DİLGİN D., DİLGİN Y., KARAKAYA S., Vural K., Project Supported by Higher Education Institutions, Karbon Nanotüp Modifiye Kalem Grafit Elektrot Kullanılarak Salbütamolün Elektrokimyasal Davranışının İncelenmesi ve Hassas Voltametrik Tayini, 2022 - 2024

GİRAY DİLGİN D., DİLGİN Y., KARAKAYA S., Emir G., Ayaz S., Project Supported by Higher Education Institutions, Bimetal Nanoparçacık Modifiye Tek Kullanımlı Elektrotla Formaldehitin Akışa Enjeksiyon Analizi, 2019 - 2021

Metrics

Publication: 56

Citation (WoS): 460

Citation (Scopus): 513

H-Index (WoS): 13

H-Index (Scopus): 14

Non Academic Experience

Çanakkale Zafer Dersanesi, Kimya Öğretmeni

Yorum Dersanesi (İzmir), Stajer Kimya Öğretmeni

Ata Ambalaj Gısa San. Ltd. Şti. (Seferihisar/İzmir), Kimyager