

# HÜSEYİN ÇELİKKAN

## PROF.

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAK-9263-2020

ScopusID: 12243912400

Yoksis Researcher ID: 133550

## Learning Knowledge

Doctorate  
2001 - 2007

Gazi University, Fen Bilimleri Enstitüsü, Kimya (Dr), Turkey

Postgraduate  
1998 - 2001

Gazi University, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), Turkey

Undergraduate  
1994 - 1998

Gazi University, Fen-Edebiyat Fakültesi, Kimya Pr., Turkey

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Metal ve metal alaşımlarına elektrokimyasal yöntemle bor ve bor bileşiklerinin biriktirilmesi, Gazi University, Fen Bilimleri Enstitüsü, Kimya (Dr), 2007

Postgraduate, Polipiroil ile modifiye edilmiş karbon elektrot kullanılarak ASV yöntemiyle Pb ve Cu tayini, Gazi University, Fen Bilimleri Enstitüsü, 2001

## Academic Titles / Tasks

Professor  
2018 - Continues

Gazi University, Fen Fakültesi, Kimya

Associate Professor  
2011 - 2018

Gazi University, Fen Fakültesi, Kimya

Assistant Professor

2008 - 2011

Gazi University, Fen Fakültesi, Kimya

Research Assistant

1999 - 2006

Gazi University, Fen Fakültesi, Kimya

## Supported Projects

1. ÇELİKKAN H., AKAY SAZAKLIOĞLU S., Project Supported by Higher Education Institutions, Grafen kuantum nanodot ile modifiye edilmiş kalem ucu grafit elektrotu yardımıyla impedimetrik CEA tayini, 2023 - Continues
2. AKKURT F., DEMİREL B., ÇELİKKAN H., ÖZKAN G., ANGI O. S., AYVALI N., OKUR M., MURATHAN H. B., Project Supported by Higher Education Institutions, Hidrojen Üretimi için Grafen Temelli Bor Katkılı Elektrokatalizör Geliştirilmesi, 2023 - Continues
3. ÇELİKKAN H., TORUL H., Akay Sazaklıoğlu S., VATANSEVER H. S., Kabadayı Ensarioğlu H., TAMER U., Project Supported by Higher Education Institutions, Modifiye Substratlar Kullanılarak Prostat Kanseri Eksozomlarının Yüzeyde Zenginleştirilmiş Raman Spektroskopisi (YZRS) ve Elektrokimyasal İmpedans Spektroskopisi (EIS) ile Tayini, 2021 - 2023
4. Çelikkan H., TAGEM Tarımsal Araştırmalar ve Politikalar Genel Müdürlüğü Projesi, Investigation of  $\beta$ -Fructofuranosidase Activities,  $\alpha$ -Amylase and Oligosaccharide Amounts of Monofloral Honey Varieties and Pine Honey Produced in Turkey with High Commercial Potential, Validation and Standardization of Methods, 2021 - 2023
5. Çelikkan H., Akkurt F., Yavuz S., Özkan H., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Boron doped carbon nanodot synthesis, characterization ana cell application, 2018 - 2021
6. Özçelik G., Akkurt F., Gürü M., Çelikkan H., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Bor Bileşikleri Kullanılarak Çadır Kumaşlarına Alev Geciktirici ve Su Geçirmezlik Özelliklerinin Kazandırılması, 2019 - 2020
7. ÇELİKKAN H., Project Supported by Higher Education Institutions, Alüminyum atıklarından flotasyon yöntemiyle alüminyum nitrür geri kazanımı, 2017 - 2019
8. ÇELİKKAN H., TUBITAK Project, Ticari Potansiyeli Olan Tricholoma Türlerinde Antikanser ve Antioksidan Bileşiklerinin Araştırılması: Aktivitelerden Sorumlu Bileşikler İle Polisakkaritlerinin İzolasyonları ve Yapılarının Spektroskopik Yöntemlerle Aydınlatılması, 2013 - 2017
9. ÇELİKKAN H., Project Supported by Higher Education Institutions, Elektrokimyasal yoldan altın analizinde grafenin elektrot olarak kullanımı, 2012 - 2016
10. DİŞLİ A., ÇELİKKAN H., TUBITAK Project, Alev Geciktirici Borlu Selülozik Çadır, 2012 - 2015
11. ÇELİKKAN H., Project Supported by Higher Education Institutions, METALİK MALZEMELER ÜZERİNE Ti ve B ELEMENTLERİNİN ELEKTROKİMYASAL YOLDAN BİRİKTİRİLMESİ, 2010 - 2012
12. ÇELİKKAN H., Project Supported by Higher Education Institutions, KARBON DESTEĞE BAĞLI NANO BOYUTTA METAL TOZLARININ SENTEZİ VE KARAKTERİZASYONU, 2010 - 2012
13. ÇELİKKAN H., TUBITAK Project, Karbon desteğe bağlı nano boyutta metal tozlarının sentezi ve karakterizasyonu, 2010 - 2011
14. Karacan M. S., Karacan N., Çelikkan H., Arslan H., TÜBİTAK International Bilateral Joint Cooperation Program Project, Molecular mechanism of action of novel chemical inhibitors of electron transport of photosystem II, 2009 - 2011
15. ÇELİKKAN H., TUBITAK Project, Sanayide kullanılan bazı metal ve alaşımların düşük sıcaklıkta elektrokimyasal olarak bor ve bor bileşikleri ile kaplanması ve buhar fazından elde edilen bor kaplamaları ile özelliklerinin karşılaştırılması, 2007 - 2009
16. ÇELİKKAN H., TUBITAK Project, Elektrospınleme Yöntemi ile Seramik Nano Bor Karbür Üretimi ve Karakterizasyonu, 2007 - 2009

## Published journal articles indexed by SCI, SSCI, and AHCI

- 1. Phage probe on RAFT polymer surface for rapid enumeration of E. coli K12**  
Panhwar S., ÇELİKKAN H., Evran E., Ekiz E., ÖZKAN HÜKÜM K., ÇETİN D., SULUDERE Z., Hakki Boyaci I., TAMER U.  
Bioelectrochemistry, vol.160, 2024 (SCI-Expanded)
- 2. Spectroscopic and electrochemical characterizations of copper complexes with thionine, azure C and azure A**  
Bayindir O., Ersin E., NAZIR H., ATAKOL O., ÇELİKKAN H.  
APPLIED ORGANOMETALLIC CHEMISTRY, vol.38, no.3, 2024 (SCI-Expanded)
- 3. To What Extent Are Orally Ingested Nanoplastics Toxic to the Hippocampus in Young Adult Rats?**  
Baş O., İlhan H., Hancı H., Çelikkan H., Ekinçi D., Değermenci M., Karapınar B. O., Warille A. A., Çankaya S., Özkasapoğlu S.  
Journal of chemical neuroanatomy, vol.132, pp.102314, 2023 (SCI-Expanded)
- 4. Fluorescent and Biocompatible Nitrogen and Sulfur Co-Doped Carbon Nanodot as an Ocular Fundus Angiography Imaging Agent**  
İlhan H., Erdem B., Ozkasapoglu S., Yayla M., Bas O., ÇELİKKAN H.  
Journal of Fluorescence, vol.33, no.5, pp.1917-1925, 2023 (SCI-Expanded)
- 5. Boron-Doped Carbon Nanodots as a Theranostic Agent for Colon Cancer Stem Cells**  
Ozkasapoglu S., Çağlayan M. G., Akkurt F., Ensarioğlu H. K., Vatansever H. S., Çelikkan H.  
ACS OMEGA, vol.8, no.33, pp.30285-30293, 2023 (SCI-Expanded)
- 6. Preventing hydrolysis of AlN powders with organophosphate coating in aqueous media**  
Kaya C., Bayındır O., Saklar S., Atakol O., Çelikkan H.  
JOURNAL OF THE SERBIAN CHEMICAL SOCIETY, vol.88, no.7-8, pp.739-747, 2023 (SCI-Expanded)
- 7. Direct impedimetric detection of exosomes and practical application in urine**  
Sazaklioglu S. A., TORUL H., VATANSEVER H. S., TAMER U., ÇELİKKAN H.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.53, no.1, pp.29-38, 2023 (SCI-Expanded)
- 8. Voltammetric determination of linagliptin in bulk and plasma sample using an electrochemical sensor based on L-cysteine modified 1T-MoS<sub>2</sub> nanosheets**  
Ates A. K., ÇELİKKAN H., ERK N.  
MICROCHEMICAL JOURNAL, vol.167, 2021 (SCI-Expanded)
- 9. Disposable electrochemical flow cell with paper-based electrode assemble**  
Torul H., Gümüştaş M., Urguplu B., Uzunoğlu A., Boyacı İ. H., Çelikkan H., Tamer U.  
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.891, 2021 (SCI-Expanded)
- 10. Facile Ion-Exchange Method for Zn Intercalated MoS<sub>2</sub> As an Efficient and Stable Catalyst toward Hydrogen Evaluation Reaction**  
Özgür D., ÖZKAN G., Atakol O., ÇELİKKAN H.  
ACS APPLIED ENERGY MATERIALS, vol.4, no.3, pp.2398-2407, 2021 (SCI-Expanded)
- 11. Synthesis of Cysteine Modified MoS<sub>2</sub> Nanocomposite: A Biocompatible Electrochemical Sensor Material and its Application to the Determination of Antidiabetic Dapagliflozin**  
Ates A. K., ÇELİKKAN H., ERK N.  
ELECTROANALYSIS, vol.32, no.7, pp.1480-1487, 2020 (SCI-Expanded)
- 12. The effect of 2D-MoS<sub>2</sub> doped polypyrrole coatings on brass corrosion**  
ASAN G., ASAN A., ÇELİKKAN H.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1203, 2020 (SCI-Expanded)
- 13. The fabrication of a highly sensitive electrochemical sensor based on AuNPs@graphene nanocomposite: Application to the determination of antidepressant vortioxetine**  
Ates A. K., ER E., ÇELİKKAN H., ERK N.  
MICROCHEMICAL JOURNAL, vol.148, pp.306-312, 2019 (SCI-Expanded)
- 14. Investigation of the Effects of MoS<sub>2</sub> Doped (PANI and PPy) Coatings on Mild Steel Corrosion in Alkaline Medium**  
Asan A., Asan G., Celikkan H.

- ACTA PHYSICA POLONICA A, vol.135, no.5, pp.987-989, 2019 (SCI-Expanded)
15. **Conductive Polymer Doped with 2D-MoS<sub>2</sub> Coatings for the Corrosion Protection of Mild Steel**  
Asan G., Asan A., Celikkan H.  
ACTA PHYSICA POLONICA A, vol.135, no.5, pp.931-934, 2019 (SCI-Expanded)
  16. **Statistical Assessment using Chemical Profiling of Ecstasy Samples Seized in Turkey**  
Bora T., Celikkan H.  
JOURNAL OF ANALYTICAL CHEMISTRY, vol.73, no.10, pp.1020-1028, 2018 (SCI-Expanded)
  17. **Reduced graphene oxide/platinum nanoparticles/nafion nanocomposite as a novel 2D electrochemical sensor for voltammetric determination of aliskiren**  
Ates A. K., ER E., ÇELİKKAN H., ERK N.  
NEW JOURNAL OF CHEMISTRY, vol.41, no.24, pp.15320-15326, 2017 (SCI-Expanded)
  18. **Room-temperature ammonia gas sensor based on reduced graphene oxide nanocomposites decorated by Ag, Au and Pt nanoparticles**  
Karaduman I., ER E., ÇELİKKAN H., ERK N., ACAR S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.722, pp.569-578, 2017 (SCI-Expanded)
  19. **An ultra-sensitive 2D electrochemical sensor based on a PtNPs@graphene/Nafion nanocomposite for determination of alpha(1)-AR antagonist silodosin in human plasma**  
ER E., ÇELİKKAN H., ERK N.  
ANALYTICAL METHODS, vol.9, no.25, pp.3782-3789, 2017 (SCI-Expanded)
  20. **A novel electrochemical nano-platform based on graphene/platinum nanoparticles/nafion composites for the electrochemical sensing of metoprolol**  
ER E., ÇELİKKAN H., ERK N.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.238, pp.779-787, 2017 (SCI-Expanded)
  21. **Electrochemical analysis of ascorbic acid with MoS<sub>2</sub> based electrode**  
ASAN G., ÇELİKKAN H.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.3, pp.617-625, 2017 (SCI-Expanded)
  22. **Cellulosic tent fabric coated with boron nitride nanosheets**  
YARAŞ A., ER E., ÇELİKKAN H., DİŞLİ A., Alicilar A.  
JOURNAL OF INDUSTRIAL TEXTILES, vol.45, no.6, pp.1689-1700, 2016 (SCI-Expanded)
  23. **Highly sensitive and selective electrochemical sensor based on high-quality graphene/nafion nanocomposite for voltammetric determination of nebivolol**  
ER E., ÇELİKKAN H., ERK N.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.224, pp.170-177, 2016 (SCI-Expanded)
  24. **A new generation gas sensing material based on high-quality graphene**  
Karaduman I., ER E., ÇELİKKAN H., ACAR S.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.221, pp.1188-1194, 2015 (SCI-Expanded)
  25. **Stripping voltammetric analysis of dicofol on graphene-modified glassy carbon electrode**  
Kocak B., ER E., ÇELİKKAN H.  
IONICS, vol.21, no.8, pp.2337-2344, 2015 (SCI-Expanded)
  26. **A new generation electrochemical sensor based on Graphene nanosheets/Gold nanoparticles/Nafion nanocomposite for determination of Silodosin**  
ER E., ÇELİKKAN H., ERK N., Aksu M. L.  
ELECTROCHIMICA ACTA, vol.157, pp.252-257, 2015 (SCI-Expanded)
  27. **A novel and highly sensitive electrochemical sensor based on a high-quality modified graphene electrode for the determination of hydrochlorothiazide in pharmaceutical formulations and human plasma**  
ER E., ÇELİKKAN H., Aksu M. L., ERK N.  
ANALYTICAL METHODS, vol.7, no.21, pp.9254-9260, 2015 (SCI-Expanded)
  28. **An efficient way to reduce graphene oxide by water elimination using phosphoric acid**  
ER E., ÇELİKKAN H.

- RSC ADVANCES, vol.4, no.55, pp.29173-29179, 2014 (SCI-Expanded)
29. **Mechanism of boron tribromide electroreduction**  
Celikkan H., Sanli A. E., Aydin H., Aksu M. L.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.39, no.9, pp.1525-1533, 2009 (SCI-Expanded)
  30. **Electrochemical corrosion properties of metal alloys used in orthopaedic implants**  
Songur M., Celikkan H., GÖKMEŞE F., Simsek S. A., Altun N. S., Aksu M. L.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.39, no.8, pp.1259-1265, 2009 (SCI-Expanded)
  31. **Electrochemical Investigation of Zinc(II)-Furdap Amide Complex in DMSO Medium**  
GÖKMEŞE F., GÖKMEŞE E., Hamurcu F., Celikkan H., Aksu M. L.  
CURRENT ANALYTICAL CHEMISTRY, vol.5, no.3, pp.244-248, 2009 (SCI-Expanded)
  32. **The Synthesis, Characterization and Electrochemical Behavior of Transition Metal Complexes Containing Nitrogen Heterocyclic Sulphur Donor Ligand**  
GÖRGÜLÜ A. O., Celikkan H., Arslan M.  
ACTA CHIMICA SLOVENICA, vol.56, no.2, pp.334-339, 2009 (SCI-Expanded)
  33. **Galvanic corrosion of titanium-based dental implant materials**  
ARSLAN H., Celikkan H., Oernek N., Ozan O., Ersoy A. E., Aksu M. L.  
JOURNAL OF APPLIED ELECTROCHEMISTRY, vol.38, no.6, pp.853-859, 2008 (SCI-Expanded)
  34. **Lead (Pb) and copper (Cu) concentration in the eggshells of Audouin's gulls (Larus audouinii) in Turkey**  
AYAŞ Z., Celikkan H., Aksu M. L.  
TURKISH JOURNAL OF ZOOLOGY, vol.32, no.4, pp.379-384, 2008 (SCI-Expanded)
  35. **Boriding titanium alloys at lower temperatures using electrochemical methods**  
Celikkan H., Ozturk M. K., Aydin H., Aksu M. L.  
THIN SOLID FILMS, vol.515, no.13, pp.5348-5352, 2007 (SCI-Expanded)
  36. **The change of blood Pb levels of basketball players after strenuous exercise**  
Savas S., Senel Ö., Okan I., Celikkan H.  
NEUROENDOCRINOLOGY LETTERS, vol.28, no.2, pp.187-190, 2007 (SCI-Expanded)
  37. **The investigation of the electrooxidation of sodium borohydride on various metal electrodes in aqueous basic solutions**  
Celikkan H., Sahin M., Aksu M. L., Veziroglu T. N.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.32, no.5, pp.588-593, 2007 (SCI-Expanded)
  38. **The change of blood Pb levels of basketball players after strenuous exercise**  
SAVAŞ S., ŞENEL Ö., OKAN İ., ÇELİKKAN H.  
Neuroendocrinology Letters, vol.28, no.2, pp.187-190, 2007 (SCI-Expanded)
  39. **Effect of six weeks aerobic training upon blood trace metals levels**  
Savas S., Senel Ö., Celikkan H., Ugras A., Aksu M. L.  
NEUROENDOCRINOLOGY LETTERS, vol.27, no.6, pp.822-827, 2006 (SCI-Expanded)
  40. **Anodic behavior of Ag metal electrode in direct borohydride fuel cells**  
Sanli E., Celikkan H., Uysal B. Z., Aksu M. L.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.31, no.13, pp.1920-1924, 2006 (SCI-Expanded)
  41. **The electroanalytical determination of sodium borohydride using a gold electrode**  
Celikkan H., Aydin H., Aksu M.  
TURKISH JOURNAL OF CHEMISTRY, vol.29, no.5, pp.519-524, 2005 (SCI-Expanded)

## Articles Published in Other Journals

1. **Sensitive and reliable lab-on-paper biosensor for label-free detection of exosomes by electrochemical impedance spectroscopy**  
Akay Sazaklıoğlu S., Torul H., Tamer U., Kabadayı H., Vatansever H. S., Gümüş B. H., Çelikkan H.  
Microchimica Acta, vol.191, pp.1-13, 2024 (Peer-Reviewed Journal)

2. **Calibration Curve Approaches for Nonlinear Data Points Obtained in Colo 320 Exosomes Determination**  
Sazaklioglu S. A., TORUL H., Kabadayi H., Vatansever H. S., TAMER U., ÇELİKKAN H.  
Analytical and Bioanalytical Electrochemistry, vol.14, no.11, pp.1027-1043, 2022 (ESCI)
3. **A Novel and Highly Sensitive Reduced Graphene Oxide Modified Electrochemical Sensor for the Determination of Chlorpyrifos in Real Sample**  
Koçak B., Çelikkan H.  
International Journal of Pure and Applied Sciences, vol.7, no.1, pp.1-12, 2021 (Peer-Reviewed Journal)
4. **Preparation of PVA Chitosan Doped with Boron Composite Fibers and Their Characterization**  
USLU İ., ÇELİKKAN H., ATAKOL O., AKSU M. L.  
Hacettepe Journal of Biology and Chemistry, vol.36, no.2, pp.117-122, 2008 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Kimyasal Ölçmeler**  
KARACAN M. S., KENAR A., ÖZCAN A., UYANIK A., SOLAK A. O., DEMİR C., ARPA ŞAHİN Ç., KENDÜZLER E., AYRANCI E., ÇELİKKAN H., et al.  
in: Nicel Kimyasal Analiz, Ali Rehber TÜRKER, Editor, Palme, Ankara, pp.13-50, 2015

## Refereed Congress / Symposium Publications in Proceedings

1. **BIOSENSOR MICROCHIPS: THE STUDY OF THE RESPONSE OF THE PENCIL GRAPHITE ELECTRODE AGAINST CARCINOEMBRYONIC ANTIGEN (CEA) TO BE USED IN MICROCHIP APPLICATIONS**  
Akay Sazaklıoğlu S., Çelikkan H.  
Aegean Analytical Chemistry Days 2023 (AACD2023), İstanbul, Turkey, 19 - 22 October 2023, pp.67
2. **EKSOZOMLARIN KAĞIT TABANLI ELEKTROTLAR KULLANILARAK İMPEDİMETRİK TAYİNİ**  
Akay Sazaklıoğlu S., Torul H., Kabadayi H., Vatansever H. S., Tamer U., Çelikkan H.  
10. Ulusal Analitik Kimya Kongresi, Muğla, Turkey, 7 - 11 September 2022, pp.135
3. **Label-Free Determination of Extracellular Vesicles onto Gold Screen Printed Electrodes by Electrochemical Impedance Spectroscopy**  
AKAY SAZAKLIOĞLU S., TORUL H., VATANSEVER H. S., TAMER U., ÇELİKKAN H.  
4th INTERNATIONAL CONGRESS on ANALYTICAL and BIOANALYTICAL CHEMISTRY, Turkey, 23 March 2022
4. **Determination of colo 320 extracellular vesicles via gold electrode and calibration curve study for high concentration sample**  
AKAY SAZAKLIOĞLU S., TORUL H., KABADAYI ENSARİOĞLU H., ÇELİKKAN H., VATANSEVER H. S., TAMER U.  
International Eurasian Conference on Biotechnology and Biochemistry, Turkey, 16 December 2020
5. **Investigation of Electrochemical Behaviours of Ethalfluralin by Differential Pulse Voltametry Method Using Glassy Carbon Electrode**  
KOÇAK B., ÇELİKKAN H.  
3 rd International Mediterranean Science and Engineering Congress (IMSEC 2018, Adana, Turkey, 24 - 26 November 2018
6. **Voltametric Analysis of Butralin**  
KOÇAK B., ÇELİKKAN H.  
3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 November 2018
7. **Conductive Polymer Doped with MoS<sub>2</sub> Coatings for The Corrosion Protection of Mild Steel.**  
ASAN G., ASAN A., ÇELİKKAN H.  
8th International Advances in Applied Physics and Materials Science Congress Exhibition (APMAS 2018), Muğla, Turkey, 24 - 30 April 2018, pp.128

8. **Investigation of the Effects of MoS<sub>2</sub> DOPED (PANI and PPy) Coatings on Mild Steel Corrosion in Alkaline Medium**  
ASAN G., ASAN A., ÇELİKKAN H.  
8th International Advances in Applied Physics and Materials Science Congress Exhibition (APMAS 2018), 24 - 30 April 2018
9. **The use of alkyl and aryl phosphate esters for preventing hydrolysis of aluminum nitride**  
Kaya C., Çelikkan H.  
9. Ulusal Analitik Kimya Kongresi, Konya, Turkey, 19 - 23 September 2018, pp.104
10. **Voltammetric determination of pendimethalin with nafion-graphene modified glassy carbon electrode and glassy electrode**  
KOÇAK B., ÇELİKKAN H.  
1st international conference on innovations in natural science and engineering, Girne, Cyprus (Kkctc), 3 - 06 January 2018
11. **The Fabrication of a New Generation and Sensitive 2D Electrochemical Sensing-platform Based on AuNPs@Graphene Nanocomposite: Application to the Determination of Antidepressant Vortioxetine in Pharmaceutical Sample**  
ATEŞ A. K., ER E., ÇELİKKAN H., ERK N.  
3rd International Turkic World Conference on Chemical Sciences and Technologies, Baku, Azerbaijan, 10 - 13 September 2017
12. **Grafenle modifiye edilmiş camsı karbon elektrot kullanarak klorpirifosun elektrokimyasal tayini**  
KOÇAK B., ÇELİKKAN H.  
6.Fiziksel Kimya Kongresi, Zonguldak, Turkey, 15 - 18 May 2017
13. **An ultra sensitive PtNPs Graphene Nafion electrochemical sensing platform for detection of silodosin in human plasma**  
ER E., ÇELİKKAN H., ERK N.  
3rd International Congress on Biosensors, Ankara, Turkey, 5 - 07 October 2016
14. **Highly sensitive electrochemical nano platform based on graphene platinum nanoparticles nafion composites for the electrochemical sensing of metoprolol**  
ER E., ÇELİKKAN H., ERK N.  
EMNT2016, Brüksel, Belgium, 17 - 19 August 2016
15. **The role of Boron Compounds in Providing Flame Retardancy to Cellulosic Tent Fabric**  
YARAŞ A., ER E., ÇELİKKAN H., DİŞLİ A., MURATHAN A. M.  
International Conference on Engineering And Natural, 24 - 28 May 2016
16. **Grafenin elektrokimyasal sensör uygulamalarındaki önemi ve çeşitli ilaç uygulamaları**  
ER E., ÇELİKKAN H., ERK N.  
IV. Eser Analiz Kongresi, Sakarya, Turkey, 19 - 22 May 2016
17. **Etkili bir yöntem ile grafen temelli elektrokimyasal nano platformların oluşturulması ve bazı ilaç uygulamaları**  
ER E., ÇELİKKAN H., ERK N.  
27. Ulusal Kimya Kongresi, Çanakkale, Turkey, 23 - 28 August 2015
18. **Ürik asitin MoS<sub>2</sub> öodifiye camsı karbon elektrot ile elektrokimyasal tayini**  
ASAN G., ÇELİKKAN H.  
27. Ulusal Kimya Kongresi, Turkey, 23 - 28 August 2015
19. **The importance of graphene in electrochemical sensor applications and a novel graphene based nanosensing material for the determination of neбивolol**  
ER E., ÇELİKKAN H., ERK N.  
Euroanalysis, 6 - 10 August 2015
20. **Dopaminin elektrokimyasal yöntemle tayini**  
ASAN G., ÇELİKKAN H.  
5. Ulusal Fiziksel Kimya Kongresi, Konya, Turkey, 16 - 19 May 2015
21. **Reduction of graphene oxide with sulphuric acid and phosphoric acid, and investigations of**

### electroanalytical applications

ER E., ÇELİKKAN H.

10th International Electrochemistry Meeting in Turkey, 4 - 08 September 2013

22. **Stripping voltammetric analysis of dicofol on graphene modified glassy carbon electrode**

KOÇAK B., ER E., ÇELİKKAN H.

10th Int. Electrochemistry Meeting, 4 - 08 August 2013

23. **Camsı Karbon Elektrot Yüzeyine Modifiye Edilmiş Grafen Varlığında Altın (III )ın Elektrokimyasal Davranışının İncelenmesi**

KARAKAYA M., ÇELİKKAN H.

26.Ulusal Kimya Kongresi, Muğla, Turkey, 1 - 06 October 2012

24. **PVA-AgNO<sub>3</sub> Hibrit Polimerinden Piroiliz Yoluyla Ag Yüklü Karbon Malzemelerin Hazırlanması ve Elektrokimyasal Davranışlarının İncelenmesi**

Gürsoy S., KARAKAYA M., ÇELİKKAN H.

25. Ulusal Kimya Kongresi, Erzurum, Turkey, 27 June - 02 July 2011

25. **Platin Yüklü Grafenin Sodyum Borhidrür Çözeltisindeki Elektrokimyasal Davranışı**

Dilek C., ER E., ÇELİKKAN H.

25. Ulusal Kimya Kongresi, Erzurum, Turkey, 27 June - 02 July 2011

26. **Electrochemical Properties of Copper Complex of Furdap Amide in Non-Aqueous Medium**

GÖKMEŞE E., ÇELİKKAN H., GÖKMEŞE F., HAMURCU F.

5th Black Sea Basin Conference on Analytical Chemistry, 23 - 26 September 2009

### Courses

Analitik kimyanın teorik temelleri 2, Postgraduate, 2020 - 2021

Kimya, Postgraduate, 2020 - 2021

Analytical chemistry, Undergraduate, 2020 - 2021

### Advising Theses

Çelikkan H., Determination Of Exosome By Impedance Spectroscopic Analysis Method Using Paper-Based Electrodes, Doctorate, S.AKAY(Student), 2022

ÇELİKKAN H., Boron Doped Carbon Nanodot Synthesis, Characterization And Cell Applications, Postgraduate, S.ÖZKASAPOĞLU(Student), 2020

ÇELİKKAN H., Alüminyum nitrür hidrolizini engelleyici olarak alkil ve aril fosfat esterlerinin kullanılması, Postgraduate, C.KAYA(Student), 2019

ÇELİKKAN H., Using Alkyl And Aryl Fosfat Esters As A Preventive For Aluminum Nitride Hydrolysis, Postgraduate, C.Kaya(Student), 2019

ÇELİKKAN H., Determination Of Dicofol And Chlorpyrifos By Means Of Dpadsv Method Using Graphene-Modified Glassy Carbon Electrodes, Doctorate, B.KOÇAK(Student), 2016

Çelikkan H., Murathan A. M., Flame Retardant Boron Doped Cellulosic Tent, Doctorate, A.YARAŞ(Student), 2016

ÇELİKKAN H., Electrochemical Determination Of Dopamine, Uric Acid And Ascorbic Acid Using MoS<sub>2</sub> Modified Glassy Carbon Electrode, Doctorate, G.Asan(Student), 2015

ÇELİKKAN H., MoS<sub>2</sub> ile modifiye edilmiş camsı karbon elektrot kullanılarak dopamin, ürik asit ve askorbik asit'in elektrokimyasal yöntemlerle tayini, Doctorate, G.ASAN(Student), 2015

ÇELİKKAN H., Anodic and cathodic stripping voltammetric determination of gold using graphene modified glassy carbon electrode, Postgraduate, M.KARAKAYA(Student), 2013

ÇELİKKAN H., Reduction of graphene oxide with sulfuric and phosphoric acids and investigation of its electroanalytical applications, Postgraduate, E.ER(Student), 2013



## Metrics

Publication: 73

Citation (WoS): 711

Citation (Scopus): 818

H-Index (WoS): 14

H-Index (Scopus): 15

## Research Areas

Analytical Chemistry, Separation Methods, Bioanalytical Methods, Electromagnetic Methods, fluorimetry, Infrared Spectroscopy, Micro and Semimicro Methods, Microchemical Analysis, Sensors, Spectroscopical Methods, Surface Analysis, Electrochemistry

## Non Academic Experience

MADEN TETKİK VE ARAMA GENEL MÜDÜRLÜĞÜ