

## Asst. Prof. GÜLGÜN AYLAZ

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: CET-8398-2022

Yoksis Researcher ID: 34260

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp A.B.D., Turkey 2017 - 2022

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp A.B.D., Turkey 2014 - 2016

Undergraduate, Ataturk University, Ziraat Fakültesi, Gıda Mühendisliği, Turkey 2007 - 2011

Undergraduate, Ataturk University, Mühendislik Fakültesi, Kimya Mühendisliği, Turkey 2006 - 2010

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Endokrin Bozucu Hormonlara Özgü Gravimetrik Nanosensörün Hazırlanması ve Moleküler Modellenmesi, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp A.B.D., 2022

Postgraduate, LDI-MS ANALİZLERİ İÇİN ETKİN VE SEÇİCİ YENİ HEDEF YÜZEYLERİN GELİŞTİRİLMESİ, Hacettepe University, Fen Bilimleri Enstitüsü, 2016

### Academic Titles / Tasks

Assistant Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2023 - Continues

Research Assistant PhD, Sivas Cumhuriyet University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2014 - 2023

Research Assistant, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp A.B.D., 2015 - 2022

### Courses

Biyomedikal Uygulamalarda Nanoteknoloji, Postgraduate, 2023 - 2024

Doğrusal Cebir, Undergraduate, 2023 - 2024

Mühendisler İçin Sayısal Yöntemler, Undergraduate, 2022 - 2023

Nanoteknolojik Spor Ekipmanlarının Üretimi, Undergraduate, 2022 - 2023

Diferansiyel Denklemler, Undergraduate, 2022 - 2023

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

- I. **Development of a molecularly imprinted polymer on silanized graphene oxide for the detection of 17-estradiol in wastewater**  
Mughal Z. u. N., AYLAZ G., Shaikh H., Memon S., ANDAÇ A. M.  
Water Environment Research, vol.96, no.3, 2024 (SCI-Expanded)
- II. **Molecularly Designed Ion-Imprinted Nanoparticles for Real-Time Sensing of Cu(II) Ions Using Quartz Crystal Microbalance**  
Aydogan N., Aylaz G., Bakhshpour M., Tugsuz T., Andaç A. M.  
BIOMIMETICS (BASEL), vol.7, no.191, pp.1-17, 2022 (SCI-Expanded)
- III. **Molecularly imprinted composite discs for transferrin recognition**  
AYLAZ G., Zenger O., Baydemir Pesint G., Andac M.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.57, no.9, pp.1359-1375, 2022 (SCI-Expanded)
- IV. **Affinity Recognition Based Gravimetric Nanosensor for Equilin Detection**  
AYLAZ G., Andac M.  
CHEMOSENSORS, vol.10, no.5, 2022 (SCI-Expanded)
- V. **Recognition of human hemoglobin with macromolecularly imprinted polymeric nanoparticles using non-covalent interactions**  
AYLAZ G., Andac M., DENİZLİ A., DUMAN M.  
JOURNAL OF MOLECULAR RECOGNITION, vol.34, no.12, 2021 (SCI-Expanded)
- VI. **Recent developments on magnetic molecular imprinted polymers (MMIPs) for sensing, capturing, and monitoring pharmaceutical and agricultural pollutants**  
AYLAZ G., Kuhn J., Lau E. C. H. T., Yeung C., Roy V. A. L., DUMAN M., Yiu H. H. P.  
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY, vol.96, no.5, pp.1151-1160, 2021 (SCI-Expanded)
- VII. **Study on Cost-Efficient Carbon Aerogel to Remove Antibiotics from Water Resources**  
AYLAZ G., Okan M., DUMAN M., AYDIN H. M.  
ACS OMEGA, vol.5, no.27, pp.16635-16644, 2020 (SCI-Expanded)
- VIII. **Selective binding of antibiotics using magnetic molecular imprint polymer (MMIP) networks prepared from vinyl-functionalized magnetic nanoparticles**  
Kuhn J., AYLAZ G., Sari E., Marco M., Yiu H. H. P., DUMAN M.  
JOURNAL OF HAZARDOUS MATERIALS, vol.387, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Investigation of Interactions Between Tetracycline Antibiotics and Bromelain Enzyme Using Docking Tools**  
Aylaz G.  
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.4, pp.2986-2996, 2023 (Peer-Reviewed Journal)
- II. **Hypericin-Loaded Chitosan Nanoparticles for Enhanced Photodynamic Therapy in A549 Lung Cancer Cells**  
Taşkonak B., Aylaz G., Andaç A. M., Güven E., Perçin Demirçelik I., Kılıç Süloğlu A.  
BIONANOSCIENCE, vol.1, no.1, pp.1-13, 2023 (ESCI)
- III. **Nanoplastiklerin Toksik Etkisi**  
Mughal Z. u. N., AYLAZ G., ANDAÇ A. M.  
Artubilim: Adana Alparslan Türkeş Bilim ve Teknoloji Üniversitesi Fen Bilimleri Dergisi, 2022 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Development of Gravimetric Nanosensor for Equilin Detection**  
Aylaz G., Andaç A. M.

4th International Environmental Chemistry Congress (EnviroChem), Antalya, Turkey, 30 October - 02 November 2022, pp.1

- II. **Preparation and Characterization of Hypericin-Loaded Chitosan Nanoparticles**  
Taşkonak B., Aylaz G., Andaç M., Güven E., Özkahraman B., Perçin I., Kılıç Süloğlu A.  
9 th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 - 24 September 2022, pp.180
- III. **Investigation of Enhanced Uptake of Hypericin with Chitosan Nanoparticles in Lung Cancer**  
Taşkonak B., Aylaz G., Andaç M., Güven E., Özkahraman B., Perçin I., Sanin S., Kılıç Süloğlu A.  
2nd International Multidisciplinary Cancer Research Congress , Giresun, Turkey, 21 - 24 July 2022, pp.33-34
- IV. **Molecular Modeling of Endocrine Disrupting Chemicals and Amino Acids**  
AYLAZ G., ANDAÇ A. M.  
3rd EURASIA BIOCHEMICAL APPROACHES & TECHNOLOGIES (EBAT) CONGRESS, Turkey, 04 November 2021, pp.13
- V. **Detection of antibiotics using molecularly imprinted magnetic nanoparticles**  
AYLAZ G., Kuhn J., Yiu H., DUMAN M.  
6th Nano Today Conference, 16 - 20 June 2019
- VI. **Detection of Erythromycin Using Magnetic Core-Shell Nanoparticles**  
Aylaz G., Çelikbiçak Ö., Duman M.  
20. Annual Linz Winter Workshop, Linz, Austria, 05 February 2018, pp.1
- VII. **Molecularly Imprinted Polymeric Nanoparticle Modified Film Based MALDI Sample Probe for Detection of Ciprofloxacin**  
AYLAZ G., ÇELİKBIÇAK Ö., DUMAN M.  
XIX Annual Linz Winter Workshop, Linz, Austria, 3 - 06 February 2017
- VIII. **A Novel Fiber Based MALDI Probe for Selective Detection of Ciprofloxacin**  
AYLAZ G., TEVLEK A., ÇELİKBIÇAK Ö., DUMAN M.  
3rd International Congress on Biosensors, Ankara, Turkey, 5 - 07 October 2016
- IX. **Farklı Ürolojik Kanser Tiplerinin İdrar Örneğinden Eş Zamanlı Kantitatif Tayini için Sentetik Belirteç Tabanlı Ped Sisteminin Geliştirilmesi**  
AYLAZ G., OKAN M., SÜLEK S., SARI E.  
1.Karadeniz Üroloji Sempozyumu, 3 - 04 June 2016
- X. **Preparation of Molecularly Imprinted Nanoparticle for the Selective Determination of Hemoglobin with UV Vis Spectrophotometer**  
AYLAZ G., ÇİÇEK Ç., ANDAÇ ÖZDİL A. M., DUMAN M.  
26th Anniversary World Congress on Biosensors, Gothenburg, Sweden, 24 - 27 May 2016

## Supported Projects

Aylaz G., Andaç A. M., TUBITAK Project, SARS-CoV-2 Mutantı Pseudo-Virüslerin Yönlendirilmiş Plastik Viral Reseptörler ile Kütle Duyarlı Sensör Sisteminde Tespit Edilmesi, 2022 - 2024

Aylaz G., Kılıç Süloğlu A., Güven E., Andaç A. M., Project Supported by Other Official Institutions, Hiperisin Yüklü Kitosan Nanopartiküllerin A549 Akciğer Kanseri Hücrelerinde Etkilerinin Araştırılması, 2019 - 2021

## Metrics

Publication: 22

Citation (WoS): 111

Citation (Scopus): 110

H-Index (WoS): 5

H-Index (Scopus): 5