

Asst. Prof. GÜLGÜN AYLAZ

Personal Information

Office Phone: [+90 346 487 2437](tel:+903464872437)

Fax Phone: [+90 346 487 1010](tel:+903464871010)

Email: gulgund@cumhuriyet.edu.tr

Web: <https://avesis.cumhuriyet.edu.tr/4164>

International Researcher IDs

ORCID: 0000-0003-0900-035X

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

Yoksis Researcher ID: 34260

Education Information

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

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotip 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 Moleküller Modellenmesi,

Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotip A.B.D., 2022

Postgraduate, LDI-MS ANALİZLERİ İÇİN ETKİN VE SEÇİCİ YENİ HEDEF YÜZEYLERİN GELİŞTİRİLMESİ, Hacettepe

University, Fen Bilimleri Enstitüsü, 2016

Research Areas

Biomedical Engineering, Bioprocess Separation Processes, Polymer Technology, Electrochemical Processes, Environmental Chemistry and Technology, Membrane Technology, Defense Technology, Biomaterial, Biosensor, Protein Chemistry, Polymers and Their Applications, Composites, nanocomposites, nanoclusters

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 Nanotip 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 Üretilimi, 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. **Current publication activity on nanoplastics & microplastics: a bibliometric analysis**
Aylaz G., Konar N. M.
Sustainable Water Resources Management, vol.10, no.95, pp.1-12, 2024 (Peer-Reviewed Journal)
- II. **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)
- III. **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)

IV. Nanoplastiklerin Toksik Etkisi

Mughal Z. u. N., AYLAZ G., ANDAÇ A. M.

Artibilim: 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., Ozkahraman 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., Çelikbıçak 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., SARİ 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 Mutant Pseudo-Virüslerin Yönlendirilmiş Plastik Viral Rezeptörler

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 Kanser Hücrelerinde Etkilerinin Araştırılması, 2019 - 2021

Metrics

Publication: 22

Citation (WoS): 97

Citation (Scopus): 110

H-Index (WoS): 4

H-Index (Scopus): 5