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### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp, Turkey 2011 - 2016

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp, Turkey 2008 - 2011

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 2004 - 2008

### Dissertations

Doctorate, Bakteriyel selüloz nanofiberler ile protein uzaklaştırılması, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp Anabilim Dalı (Disiplinlerarası), 2016

### Research Areas

Chemistry, Natural Sciences

### Academic Titles / Tasks

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2016 - Continues

Research Assistant, Hacettepe University, Fen Bilimleri Enstitüsü, Nanoteknoloji Ve Nanotıp Anabilim Dalı (Disiplinlerarası), 2009 - 2016

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

- Plasmonic sensing platform for C-reactive protein recognition via synthetic receptors decorated on graphene oxide and gold nanoparticles**  
Ovezova M., YILMAZ F., GÖKTÜRK BAŞAL I., DENİZLİ A.  
MICROCHEMICAL JOURNAL, 2024 (SCI-Expanded)
- Development of Molecularly Imprinted Magnetic Amino Acid-Based Nanoparticles for Voltammetric Analysis of Lead Ions in Honey**  
Karagozlu M., Asir S., Abu Shama N., GÖKTÜRK BAŞAL I., YILMAZ F., TÜRKMEN D., DENİZLİ A., Ozgoren M.  
POLYMERS, no.13, 2024 (SCI-Expanded)
- Phenylalanine functionalized cryogels for selective cholesterol removal from milk**

GÖKTÜRK BAŞAL I, SAYLAN İNCİ Y., Yılmaz F., KARTAL ERSOY F., DENİZLİ A.  
Chemical Papers, 2024 (SCI-Expanded)

- IV. **Electrochemical Detection of Cortisol by Silver Nanoparticle-Modified Molecularly Imprinted Polymer-Coated Pencil Graphite Electrodes**  
Shama N. A., Aşır S., GÖKTÜRK BAŞAL I., Yılmaz F., TÜRKMEN D., DENİZLİ A.  
ACS Omega, vol.8, no.32, pp.29202-29212, 2023 (SCI-Expanded)
- V. **Aptamer-Based Point-of-Care Devices: Emerging Technologies and Integration of Computational Methods**  
Aslan Y., Atabay M., Chowdhury H. K., Göktürk I., Saylan Y., İnci F.  
Biosensors, vol.13, no.5, 2023 (SCI-Expanded)
- VI. **A surface plasmon resonance sensor with synthetic receptors decorated on graphene oxide for selective detection of benzylpenicillin**  
Çelik O., Saylan Y., Göktürk I., Yılmaz F., DENİZLİ A.  
Talanta, vol.253, 2023 (SCI-Expanded)
- VII. **SPR Signal Enhancement With Silver Nanoparticle-Assisted Plasmonic Sensor for Selective Adenosine Detection**  
GÖKTÜRK BAŞAL I., Bakhshpour M., ÇİMEN D., YILMAZ F., BERELİ N., DENİZLİ A.  
IEEE SENSORS JOURNAL, vol.22, no.15, pp.14862-14869, 2022 (SCI-Expanded)
- VIII. **Selective Amplification of Plasmonic Sensor Signal for Cortisol Detection Using Gold Nanoparticles**  
Yılmaz G. E., SAYLAN İNCİ Y., GÖKTÜRK BAŞAL I., YILMAZ F., DENİZLİ A.  
BIOSENSORS-BASEL, vol.12, no.7, 2022 (SCI-Expanded)
- IX. **Gold-Modified Molecularly Imprinted N-Methacryloyl-(1)-phenylalanine-containing Electrodes for Electrochemical Detection of Dopamine**  
Abu Shama N., Asir S., Ozsoz M., GÖKTÜRK BAŞAL I., TÜRKMEN D., YILMAZ F., DENİZLİ A.  
BIOENGINEERING-BASEL, vol.9, no.3, 2022 (SCI-Expanded)
- X. **S-citalopram imprinted monolithic columns for capillary electrochromatography enantioseparations**  
Derazshamshir A., GÖKTÜRK BAŞAL I., YILMAZ F., DENİZLİ A.  
ELECTROPHORESIS, vol.42, no.24, pp.2672-2682, 2021 (SCI-Expanded)
- XI. **Sensitive and selective detection of amitrole based on molecularly imprinted nanosensor**  
ÇAKIR O., Bakhshpour M., GÖKTÜRK BAŞAL I., YILMAZ F., BAYSAL Z.  
JOURNAL OF MOLECULAR RECOGNITION, vol.34, no.11, 2021 (SCI-Expanded)
- XII. **Development of Molecularly Imprinted Polymer-Based Optical Sensor for the Sensitive Penicillin G Detection in Milk**  
Safran V., GÖKTÜRK BAŞAL I., Bakhshpour M., YILMAZ F., DENİZLİ A.  
CHEMISTRYSELECT, vol.6, no.43, pp.11865-11875, 2021 (SCI-Expanded)
- XIII. **Selective dopamine detection by SPR sensor signal amplification using gold nanoparticles**  
TÜRKMEN D., Bakhshpour M., GÖKTÜRK BAŞAL I., Asir S., YILMAZ F., DENİZLİ A.  
NEW JOURNAL OF CHEMISTRY, vol.45, pp.18296-18306, 2021 (SCI-Expanded)
- XIV. **Quartz Crystal Microbalance (QCM) Based Biosensor Functionalized by HER2/neu Antibody for Breast Cancer Cell Detection**  
YILMAZ M., Bakhshpour M., GÖKTÜRK BAŞAL I., Piskin A. K., DENİZLİ A.  
CHEMOSENSORS, vol.9, no.4, 2021 (SCI-Expanded)
- XV. **Selective recognition of nucleosides by boronate affinity organic-inorganic hybrid monolithic column**  
Ektirici S., GÖKTÜRK BAŞAL I., YILMAZ F., DENİZLİ A.  
JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, vol.1162, 2021 (SCI-Expanded)
- XVI. **Magnetic bacterial cellulose nanofibers for nucleoside recognition**  
SAYLAN Y., GÖKTÜRK BAŞAL I., Pospiskova K., Safarik I., DENİZLİ A.  
CELLULOSE, vol.27, no.16, pp.9479-9492, 2020 (SCI-Expanded)
- XVII. **Molecularly imprinted cryogel cartridges for the selective recognition of tyrosine**

- Bakhshpour M., GÖKTÜRK BAŞAL I., BERELİ N., DENİZLİ A.  
BIOTECHNOLOGY PROGRESS, vol.36, no.5, 2020 (SCI-Expanded)
- XVIII. **Electrochromatographic separation of hydrophobic amino acid enantiomers by molecularly imprinted capillary columns**  
Sarkaya K., Asir S., GÖKTÜRK BAŞAL I., YILMAZ F., Yavuz H., DENİZLİ A.  
PROCESS BIOCHEMISTRY, vol.92, pp.69-77, 2020 (SCI-Expanded)
- XIX. **A dye-affinity cryogel membrane for malate dehydrogenase purification from *Saccharomyces cerevisiae***  
Hamade K., Gokturk I., BERELİ N., TÜRKMEN D., Elkak A., DENİZLİ A.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.31, pp.38-52, 2020 (SCI-Expanded)
- XX. **Polymethacryloyl-L-Phenylalanine [PMAPA]-Based Monolithic Column for Capillary Electrochromatography**  
Derazshamshir A., Asir S., GÖKTÜRK BAŞAL I., Ektirici S., YILMAZ F., DENİZLİ A.  
JOURNAL OF CHROMATOGRAPHIC SCIENCE, vol.57, no.8, pp.758-765, 2019 (SCI-Expanded)
- XXI. **Rapid sensing of Cu<sup>+2</sup> in water and biological samples by sensitive molecularly imprinted based plasmonic biosensor**  
SAFRAN V., Gokturk I., Derazshamshir A., YILMAZ F., SAĞLAM N., DENİZLİ A.  
MICROCHEMICAL JOURNAL, vol.148, pp.141-150, 2019 (SCI-Expanded)
- XXII. **Phenol removal from wastewater by surface imprinted bacterial cellulose nanofibres**  
Derazshamshir A., Gokturk I., Tamahkar E., YILMAZ F., SAĞLAM N., DENİZLİ A.  
ENVIRONMENTAL TECHNOLOGY, 2019 (SCI-Expanded)
- XXIII. **Protein depletion with bacterial cellulose nanofibers**  
Gokturk I., Tamahkar E., Yilmaz F., DENİZLİ A.  
JOURNAL OF CHROMATOGRAPHY B-ANALYTICAL TECHNOLOGIES IN THE BIOMEDICAL AND LIFE SCIENCES, vol.1099, pp.1-9, 2018 (SCI-Expanded)
- XXIV. **Poly(vinyl alcohol)/polyethyleneimine (PVA/PEI) blended monolithic cryogel columns for the depletion of haemoglobin from human blood**  
Göktürk I., Derazshamshir A., Yılmaz F., DENİZLİ A.  
Separation Science and Technology (Philadelphia), vol.51, no.11, pp.1787-1797, 2016 (SCI-Expanded)
- XXV. **Removal of iron by chelation with molecularly imprinted supermacroporous cryogel.**  
ÇİMEN D., Göktürk I., YILMAZ F.  
Artificial cells, nanomedicine, and biotechnology, vol.44, pp.1158-66, 2016 (SCI-Expanded)
- XXVI. **Synthesis of a specific monolithic column with artificial recognition sites for L-glutamic acid via cryo-crosslinking of imprinted nanoparticles**  
GOKTURK I., ÜZEK R., UZUN L., DENİZLİ A.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.44, no.4, pp.1133-1140, 2016 (SCI-Expanded)
- XXVII. **Catalase purification from rat liver with iron-chelated poly(hydroxyethyl methacrylate-N-methacryloyl-(L)-glutamic acid) cryogel discs**  
Gokturk I., Percin I., DENİZLİ A.  
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.46, no.6, pp.602-609, 2016 (SCI-Expanded)
- XXVIII. **Characterization and cellular interaction of fluorescent-labeled PHEMA nanoparticles**  
Gokturk I., Karakoc V., ONUR M. A., DENİZLİ A.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.41, no.2, pp.78-84, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- Molecularly imprinted biomimetic plasmonic sensor decorated with gold nanoparticles for selective and sensitive detection of bisphenol A**  
GÖKTÜRK BAŞAL I., Asir S., TÜRKMEN D., DENİZLİ A., YILMAZ F.  
TALANTA OPEN, vol.10, 2024 (ESCI)

## II. Nanoscale separations: Recent achievements

Aydođan C., Beltekin B., Aslan H., Yılmaz F., Gktrk I., DENİZLİ A., El-Rassi Z.  
Journal of Chromatography Open, vol.2, 2022 (Scopus)

## III. Molecular Imprinting Technology for Biomimetic Assemblies

BERELİ N., AKGNLL S., ASLIYCE OBAN S., İMEN D., GKTRK BAŐAL I., TRKMEN D., YAVUZ ALAGZ H., DENİZLİ A.

Hacettepe Journal of Biology and Chemistry, vol.48, no.5, pp.575-601, 2020 (Peer-Reviewed Journal)

## IV. Separation of histidine enantiomers by capillary electrochromatography with molecularly imprinted monolithic columns

Sarkaya K., Asir S., GKTRK BAŐAL I., Ektirici S., YILMAZ F., Yavuz H., DENİZLİ A.  
SEPARATION SCIENCE PLUS, vol.3, no.6, pp.235-245, 2020 (ESCI)

## V. Separation of D,L-Ampicillin by ligand exchange-micellar electrokinetic chromatography

Sarı D., DERAZSHAMSHIR A., AŐIR S., GKTRK BAŐAL I., YILMAZ F., DENİZLİ A.  
BIOINTERFACE RESEARCH IN APPLIED CHEMISTRY, vol.9, no.6, pp.4522-4533, 2019 (ESCI)

## Books & Book Chapters

### I. Ultrasensitive Sensors Based o Plasmonic Nanoparticles

Denizli F., GKTRK BAŐAL I., ZGR E., YILMAZ F.

in: Plasmonic Sensors and Their Applications, , Editor, WILEY-VCH GmbH, pp.171-188, 2022

### II. Utility of nanobiosensors in agriculture

ALIŐIR M., GKTRK BAŐAL I., TRKMEN D., YILMAZ F., DENİZLİ A.

in: Bionanomaterials for Environmental and Agricultural Applications, Ravindra Pratap Singh, Kshitij RB Singh, Editor, Institute of Physics Publishing, Londrina, pp.4-31, 2021

### III. Cryogels for protein purification and depletion

GKTRK BAŐAL I., Bakhshpour M., YILMAZ F., KARTAL ERSOY F., BERELİ N., DENİZLİ A.

in: Cryogels and Monoliths, Bo Mattiasson, Adil Denizli, Editor, Hacettepe niversitesi, Ankara, pp.95-118, 2018

## Refereed Congress / Symposium Publications in Proceedings

### I. KAPILER ELEKTROKROMATOĞRAFI İIN POLİMETAKRİLOİL-LFENİLALANIN [PMPA]-TABANLI MONOLİTİK KOLON

DERAZSHAMSHIR A., AŐIR S., GKTRK BAŐAL I., EKTİRİCİ S., YILMAZ F., DENİZLİ A.

13.ULUSAL AFİNİTE TEKNİKLERİ KONGRESİ, Turkey, 4 - 06 September 2019

### II. SPERMAKROGZENEKLI KRIYOJELLER İLE KOLESTEROL UZAKLAŐTIRILMASI,

GKTRK BAŐAL I., SAYLAN Y., ZSEVGİ M., YILMAZ F., YAVUZ ALAGZ H., DENİZLİ A.

13.ULUSAL AFİNİTE TEKNİKLERİ KONGRESİ, Turkey, 4 - 06 September 2019

### III. Separation of D,L-ampicillin by Ligand Exchange-Micellar Electrokinetic Chromatography

AŐIR S., GKTRK BAŐAL I., derazshamshir A., Sarı D., Ektirici S., TOPU A. A., DENİZLİ A.

18. Uluslararası Katılımlı Kromatografi Kongresi, İstanbul, Turkey, 15 - 18 November 2018

### IV. Bakteriyel Selloz Nanofiberler ile Protein Uzaklaőtırılması

GKTRK BAŐAL I., TAMAHKAR IRMAK E., YILMAZ F., DENİZLİ A.

17. Kromatografi Kongresi, Turkey, 20 - 22 September 2017

### V. Development of Molecularly Imprinted Surface Plasmon Resonance Sensor for Albumin Detection

SAYLAN Y., GKTRK BAŐAL I., YILMAZ F., DENİZLİ A.

BIOMED 2017, 12 - 14 May 2017

### VI. Poly vinyl alcohol polyethyleneimine PVA PEI blended monolithic cryogelcolumns for the depletion of haemoglobin from human blood

PERİN DEMİRELİK I., GKTRK BAŐAL I., DENİZLİ A.

10. Ulusal Afinite Teknikleri Kongresi, Turkey, 26 May 2016
- VII. **BOYA LİGAND AFİNİTE KRİYOJELLER İLE SACCHAROMYCES CEREVISIAE DEN MALAT DEHİDROGENAZ ENZİMİNİN SAFLAŞTIRILMASI**  
PERÇİN DEMİRÇELİK I., GÖKTÜRK BAŞAL I., DENİZLİ A.  
10. Ulusal afinite teknikleri kongresi, Turkey, 26 May 2016
- VIII. **Determination of Bupivacaine on Quartz Crystal Microbalance Based Nanosensors**  
TAN G., SAYLAN Y., GÖKTÜRK BAŞAL I., YILMAZ F., DENİZLİ A.  
2. Uluslararası Biyosensör kongresi, İzmir, 10 - 12 June 2015
- IX. **Dondurarak Çapraz Bağlama ile Moleküler Baskılanmış Nanopartiküllerin Kriyo şekillendirilmesi**  
GÖKTÜRK BAŞAL I., ÜZEK R., UZUN L., DENİZLİ A.  
15. Ulusal kromatografi Kongresi, Uşak, Turkey, 8 - 10 April 2015

## Supported Projects

GÖKTÜRK BAŞAL I., SAYLAN Y., YILMAZ F., Project Supported by Higher Education Institutions, Kriyojeller ile Gıda Örneklerinden Seçici Olarak Kolesterol Uzaklaştırılması, 2018 - 2021

SAYLAN İNCİ Y., GÖKTÜRK BAŞAL I., Project Supported by Higher Education Institutions, Moleküler Baskılanmış Manyetik Bakteriyel Selüloz Nanofiberler ile Nükleozid Saflaştırılması, 2018 - 2019

PERÇİN DEMİRÇELİK I., BAYDEMİR PEŞİNT G., GÖKTÜRK BAŞAL I., Project Supported by Higher Education Institutions, Katalaz Enzimine Afinite Gösteren Kriyojel Disklerin Hazırlanması, 2015 - 2015

## Metrics

Publication: 45

Citation (WoS): 61

Citation (Scopus): 143

H-Index (WoS): 6

H-Index (Scopus): 7

## Non Academic Experience

Linköping Üniversitesi Fizik, Kimya ve Biyoloji Bölümü