

# **Doç.Dr. YEŞEREN SAYLAN İNCİ**

## **Kişisel Bilgiler**

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## **Uluslararası Araştırmacı ID'leri**

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Yoksis Araştırmacı ID: 110622

## **Eğitim Bilgileri**

Doktora, Hacettepe Üniversitesi, Fen Bilimleri, Kimya, Türkiye 2012 - 2017

Yüksek Lisans, Hacettepe Üniversitesi, Fen Bilimleri, Kimya, Türkiye 2009 - 2012

Lisans, Hacettepe Üniversitesi, Fen Fakültesi, Kimya, Türkiye 2003 - 2008

## **Yabancı Diller**

İngilizce, B2 Orta Üstü

## **Yaptığı Tezler**

Doktora, Preparation of hemoglobin imprinted surface plasmon resonance biosensors, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, 2017

Yüksek Lisans, Boronat afinite kromatografisi için monolitik HPLC kolonları, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Kimya (YI) (Tezli), 2012

## **Araştırma Alanları**

Kimya, Biyokimya, Protein Kimyası, Temel Bilimler

## **Akademik Unvanlar / Görevler**

Dr.Öğr.Üyesi, Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2020 - Devam Ediyor

Araştırma Görevlisi Dr., Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2017 - 2020

Araştırma Görevlisi, Hacettepe Üniversitesi, Fen Fakültesi, Kimya Bölümü, 2010 - 2017

## **SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler**

### **I. Biosensing Platforms for Cardiac Biomarker Detection**

Gerdan Z., SAYLAN İNCİ Y., DENİZLİ A.

ACS Omega, cilt.9, sa.9, ss.9946-9960, 2024 (SCI-Expanded)

- II. Biosensing Applications of Molecularly Imprinted-Polymer-Based Nanomaterials**  
SAYLAN İNCİ Y., Kılıç S., DENİZLİ A.  
Processes, cilt.12, sa.1, 2024 (SCI-Expanded)
- III. 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. Exploring the Versatility of Exosomes: A Review on Isolation, Characterization, Detection Methods, and Diverse Applications**  
Altıntaş Ö., SAYLAN İNCİ Y.  
Analytical Chemistry, cilt.95, sa.44, ss.16029-16048, 2023 (SCI-Expanded)
- V. Unveiling the pollution of bacteria in water samples through optic sensor**  
SAYLAN İNCİ Y.  
Microchemical Journal, cilt.193, 2023 (SCI-Expanded)
- VI. In situ synthesis and dynamic simulation of molecularly imprinted polymeric nanoparticles on a micro-reactor system**  
Erdem Ö., Eş I., SAYLAN İNCİ Y., Atabay M., Gungen M. A., Ölmez K., DENİZLİ A., Inci F.  
Nature communications, cilt.14, sa.1, ss.4840, 2023 (SCI-Expanded)
- VII. Aptamer-Based Point-of-Care Devices: Emerging Technologies and Integration of Computational Methods**  
Aslan Y., Atabay M., Chowdhury H. K., Göktürk I., Saylan Y., Inci F.  
Biosensors, cilt.13, sa.5, 2023 (SCI-Expanded)
- VIII. 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, cilt.253, 2023 (SCI-Expanded)
- IX. Recent Advances of Optical Sensors for Copper Ion Detection**  
Gerdan Z., Saylan Y., Denizli A.  
MICROMACHINES, cilt.13, sa.8, 2022 (SCI-Expanded)
- X. Selective Amplification of Plasmonic Sensor Signal for Cortisol Detection Using Gold Nanoparticles**  
Yilmaz G. E., SAYLAN İNCİ Y., GÖKTÜRK BAŞAL I., YILMAZ F., DENİZLİ A.  
BIOSENSORS-BASEL, cilt.12, sa.7, 2022 (SCI-Expanded)
- XI. Sensitive and real-time detection of IgG using interferometric reflecting imaging sensor system**  
Bakhshpour M., Chiodi E., Celebi I., SAYLAN İNCİ Y., Unlu N. L., Unlu M. S., DENİZLİ A.  
BIOSENSORS & BIOELECTRONICS, cilt.201, 2022 (SCI-Expanded)
- XII. Ion-Imprinted Polymer-on-a-Sensor for Copper Detection**  
Gerdan Z., SAYLAN İNCİ Y., Ugur M., DENİZLİ A.  
BIOSENSORS-BASEL, cilt.12, sa.2, 2022 (SCI-Expanded)
- XIII. Recent Advances in Microneedle-Based Sensors for Sampling, Diagnosis and Monitoring of Chronic Diseases**  
Erdem O., Es I., Akceoglu G. A., SAYLAN Y., Inci F.  
BIOSENSORS-BASEL, cilt.11, sa.9, 2021 (SCI-Expanded)
- XIV. A Snapshot of Microfluidics in Point-of-Care Diagnostics: Multifaceted Integrity with Materials and Sensors**  
Akceoglu G. A., SAYLAN Y., Inci F.  
ADVANCED MATERIALS TECHNOLOGIES, cilt.6, sa.7, 2021 (SCI-Expanded)
- XV. Designing composite cryogel carriers for tyrosine adsorption**  
Ozturk G., SAYLAN Y., DENİZLİ A.  
SEPARATION AND PURIFICATION TECHNOLOGY, cilt.254, 2021 (SCI-Expanded)
- XVI. Comparison of molecularly imprinted plasmonic nanosensor performances for bacteriophage detection**  
Erdem O., CİHANGİR N., SAYLAN Y., DENİZLİ A.

- NEW JOURNAL OF CHEMISTRY, cilt.44, sa.41, ss.17654-17663, 2020 (SCI-Expanded)
- XVII. **Magnetic bacterial cellulose nanofibers for nucleoside recognition**  
SAYLAN Y., GÖKTÜRK BAŞAL I., Pospiskova K., Safarik I., DENİZLİ A.  
CELLULOSE, cilt.27, sa.16, ss.9479-9492, 2020 (SCI-Expanded)
- XVIII. **Molecularly imprinted polymer integrated plasmonic nanosensor for cocaine detection**  
ÖZGÜR E., SAYLAN Y., BERELİ N., TÜRKMEN D., DENİZLİ A.  
Journal of Biomaterials Science, Polymer Edition, cilt.31, sa.9, ss.1211-1222, 2020 (SCI-Expanded)
- XIX. **Advances in Molecularly Imprinted Systems: Materials, Characterization Methods and Analytical Applications**  
SAYLAN Y., DENİZLİ A.  
CURRENT ANALYTICAL CHEMISTRY, cilt.16, sa.3, ss.196-207, 2020 (SCI-Expanded)
- XX. **Molecularly Imprinted Polymer-Based Microfluidic Systems for Point-of-Care Applications**  
SAYLAN Y., DENİZLİ A.  
MICROMACHINES, cilt.10, sa.11, 2019 (SCI-Expanded)
- XXI. **Detecting Fingerprints of Waterborne Bacteria on a Sensor**  
SAYLAN Y., Erdem O., CİHANGİR N., DENİZLİ A.  
CHEMOSENSORS, cilt.7, sa.3, 2019 (SCI-Expanded)
- XXII. **An Alternative Medical Diagnosis Method: Biosensors for Virus Detection**  
SAYLAN Y., Erdem O., ÜNAL S., DENİZLİ A.  
BIOSENSORS-BASEL, cilt.9, sa.2, 2019 (SCI-Expanded)
- XXIII. **Molecularly Imprinted Polymer Based Sensors for Medical Applications**  
SAYLAN Y., Akgonullu S., Yavuz H., ÜNAL S., DENİZLİ A.  
SENSORS, cilt.19, sa.6, 2019 (SCI-Expanded)
- XXIV. **Molecularly imprinted nanoparticles based plasmonic sensors for real-time Enterococcus faecalis detection**  
Erdem O., SAYLAN Y., CİHANGİR N., DENİZLİ A.  
BIOSENSORS & BIOELECTRONICS, cilt.126, ss.608-614, 2019 (SCI-Expanded)
- XXV. **Introduction to Nanoscience, Nanomaterials, Nanocomposite, Nanopolymer, and Engineering Smart Materials**  
SAYLAN Y., Yavuz H., ÜLGER C., DENİZLİ A., SAĞLAM N.  
MICROBIAL NANOBIONICS: VOL 2, BASIC RESEARCH AND APPLICATIONS, ss.1-12, 2019 (SCI-Expanded)
- XXVI. **Molecular Fingerprints of Hemoglobin on a Nanofilm Chip**  
SAYLAN Y., DENİZLİ A.  
SENSORS, cilt.18, sa.9, 2018 (SCI-Expanded)
- XXVII. **A Novel On-Chip Method for Differential Extraction of Sperm in Forensic Cases**  
Inci F., Ozen M. O., Saylan Y., Miansari M., Cimen D., Dhara R., Chinnasamy T., Yuksekaya M., Filippini C., Kumar D. K., et al.  
ADVANCED SCIENCE, cilt.5, sa.9, 2018 (SCI-Expanded)
- XXVIII. **Synthesis of hydrophobic nanoparticles for real-time lysozyme detection using surface plasmon resonance sensor**  
SAYLAN Y., Yilmaz F., Derazshamshir A., Yilmaz E., DENİZLİ A.  
JOURNAL OF MOLECULAR RECOGNITION, cilt.30, sa.9, 2017 (SCI-Expanded)
- XXIX. **Molecular Imprinting of Macromolecules for Sensor Applications**  
SAYLAN Y., Yilmaz F., ÖZGÜR E., DERAZSHAMSHIR A., Yavuz H., DENİZLİ A.  
SENSORS, cilt.17, sa.4, 2017 (SCI-Expanded)
- XXX. **Development of surface plasmon resonance sensors based on molecularly imprinted nanofilms for sensitive and selective detection of pesticides**  
SAYLAN Y., AKGONULLU S., ÇİMEN D., DERAZSHAMSHIR A., BERELİ N., Yilmaz F., DENİZLİ A.  
SENSORS AND ACTUATORS B-CHEMICAL, cilt.241, ss.446-454, 2017 (SCI-Expanded)
- XXXI. **Recognition of lysozyme using surface imprinted bacterial cellulose nanofibers**  
SAYLAN Y., Tamahkar E., DENİZLİ A.

- JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, cilt.28, sa.16, ss.1950-1965, 2017 (SCI-Expanded)
- XXXII. **Surface plasmon resonance sensors for real-time detection of cyclic citrullinated peptide antibodies**  
DIBEKKAYA H., SAYLAN Y., Yilmaz F., DERAZSHAMSHIR A., DENİZLİ A.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, cilt.53, sa.9, ss.585-594, 2016 (SCI-Expanded)
- XXXIII. **Alanine Functionalized Magnetic Nanoparticles for Reversible Amyloglucosidase Immobilization**  
SAYLAN Y., UZUN L., DENİZLİ A.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, cilt.54, sa.1, ss.454-461, 2015 (SCI-Expanded)
- XXXIV. **Surface imprinting approach for preparing specific adsorbent for IgG separation**  
SAYLAN Y., ÜZEK R., UZUN L., DENİZLİ A.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, cilt.25, sa.9, ss.881-894, 2014 (SCI-Expanded)
- XXXV. **Monolithic Boronate Affinity Columns for IgG Separation**  
SAYLAN Y., BERELİ N., UZUN L., DENİZLİ A.  
SEPARATION SCIENCE AND TECHNOLOGY, cilt.49, sa.10, ss.1555-1565, 2014 (SCI-Expanded)
- XXXVI. **Hydrophobic microbeads as an alternative pseudo-affinity adsorbent for recombinant human interferon-alpha via hydrophobic interactions**  
SAYLAN Y., Sari M. M., Ozkara S., UZUN L., DENİZLİ A.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, cilt.32, sa.4, ss.937-944, 2012 (SCI-Expanded)
- XXXVII. **L-Histidine imprinted supermacroporous cryogels for protein recognition**  
BERELİ N., SAYLAN Y., UZUN L., Say R., DENİZLİ A.  
SEPARATION AND PURIFICATION TECHNOLOGY, cilt.82, ss.28-35, 2011 (SCI-Expanded)

## Düger Dergilerde Yayınlanan Makaleler

- I. **Microfluidic-based molecularly imprinted polymers-integrated optic sensors**  
SAYLAN İNCİ Y., Altuntaş Ö., DENİZLİ A.  
Results in Optics, cilt.13, 2023 (Scopus)
- II. **Benchmarking Polymeric Cryogels for Immobilized Metal Affinity Chromatography**  
SAYLAN Y.  
Hacettepe Journal of Biology and Chemistry, cilt.51, sa.1, ss.125-132, 2023 (Hakemli Dergi)
- III. **Advances in Biomimetic Systems for Molecular Recognition and Biosensing**  
SAYLAN Y., Erdem O., Inci F., DENİZLİ A.  
BIOMIMETICS, cilt.5, sa.2, 2020 (ESCI)
- IV. **Supermacroporous Composite Cryogels in Biomedical Applications**  
SAYLAN Y., DENİZLİ A.  
GELS, cilt.5, sa.2, 2019 (ESCI)
- V. **Molecularly Imprinted Polymers for Removal of Metal Ions: An Alternative Treatment Method**  
ERDEM Ö., SAYLAN Y., ANDAÇ ÖZDİL A. M., DENİZLİ A.  
biomimetics, 2018 (Hakemli Dergi)

## Kitap & Kitap Bölümleri

- I. **Mass-sensitive based biosensors**  
ÖZGÜR E., SAYLAN İNCİ Y., AKGÖNÜLLÜ S., DENİZLİ A.  
Biosensors: Fundamentals, Emerging Technologies, and Applications, , Editör, CRC Press, ss.89-104, 2022
- II. **Virus-Based Nanocarriers for Targeted Drug Delivery**  
AKGÖNÜLLÜ S., Bakhshpour M., SAYLAN Y., DENİZLİ A.  
Viral and Antiviral Nanomaterials Synthesis, Properties, Characterization, and Application, Devarajan Thangadurai,

- Saher Islam, Charles Oluwaseun Adetunji, Editör, CRC Press, Boca Raton, ss.173-191, 2022
- III. Imprinted polymers in biosensors**  
 SAYLAN İNCİ Y., AKGÖNÜLLÜ S., BERELİ N., DENİZLİ A.  
*Biosensors: Fundamentals, Emerging Technologies, and Applications*, , Editör, CRC Press, ss.123-133, 2022
- IV. Scaling up of biosensors for clinical applications and commercialization**  
 SAYLAN İNCİ Y., AKGÖNÜLLÜ S., BERELİ N., YAVUZ ALAGÖZ H., DENİZLİ A.  
*Advanced Biosensors for Virus Detection Smart Diagnostics to Combat SARS-CoV-2*, , Editör, Academic Press , ss.407-421, 2022
- V. Nanosensors for smartphone-enabled sensing devices**  
 SAYLAN İNCİ Y., AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.  
*Nanotechnology-Based Smart Remote Sensing Networks for Disaster Prevention*, , Editör, Elsevier, ss.85-1104, 2022
- VI. Nanosensors for smartphone-enabled sensing devices**  
 SAYLAN Y., AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.  
*Nanotechnology-Based Smart Remote Sensing Networks for Disaster Prevention*, , Editör, Elsevier, ss.85-104, 2022
- VII. Plasmonic Sensors for Detection of Chemical and Biological Warfare Agents**  
 AKGÖNÜLLÜ S., SAYLAN Y., BERELİ N., TÜRKMEN D., YAVUZ ALAGÖZ H., DENİZLİ A.  
*Plasmonic Sensors and their Applications*, Adil Denizli, Editör, Wiley, Weinheim, ss.71-85, 2021
- VIII. Plasmonic Smart Nanosensors for the Determination of Environmental Pollutants**  
 SAYLAN Y., YILMAZ F., ÖZGÜR E., DERAZSHAMSHIR A., DENİZLİ A.  
*Emerging Carbon-Based Nanocomposites for Environmental Applications*, Ajay Kumar Mishra Chaudhery Mustansar Hussain Shivani Bhardwaj Mishra, Editör, Scrivener Publishing / Wiley, ss.237-279, 2020
- IX. Molecularly Imprinted Sensors for Detecting Controlled Release of Pesticides.**  
 Yılmaz F., Bereli N., Derazshamshir A., Çimen D., Akgönüllü S., Saylan Y., Topçu A. A., Denizli A.  
*Controlled Release of Pesticides for Sustainable Agriculture*, Rakhamol K. R., Sabu Thomas, Tatiana Volova Jayachandran K., Editör, Springer, London/Berlin , Zürich, ss.207-235, 2019
- X. MASS TRANSFER IN CRYOGELS**  
 BATTAL D., AKGÖNÜLLÜ S., ÇİMEN D., SAYLAN Y., ASLİYÜCE ÇOBAN S., DENİZLİ A.  
*CRYOGELS AND MONOLITHS*, MATTIASSON B., DENİZLİ A., Editör, PALME DİZGİ-GRAFİK BİRİMİ, Ankara, ss.181-188, 2019
- XI. Surface plasmon resonance sensors for medical diagnosis**  
 SAYLAN Y., YILMAZ F., ÖZGÜR E., DERAZSHAMSHIR A., BERELİ N., YAVUZ ALAGÖZ H., DENİZLİ A.  
*Nanotechnology Characterization Tools for Biosensing and Medical Diagnosis*, Kumar, C.S.S.R., Editör, Springer Berlin Heidelberg, ss.425-458, 2018
- XII. Surface plasmon resonance based nanosensors for detection of triazinic pesticides in agricultural foods**  
 YILMAZ F., SAYLAN Y., AKGÖNÜLLÜ S., ÇİMEN D., DERAZSHAMSHİR A., BERELİ N., DENİZLİ A.  
*New Pesticides and Soil Sensors*, Alexandru Mihai Grumezescu, Editör, Academic Press, ss.679-718, 2017

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. Construction of hydrophobic nanoparticles based surface plasmon resonance biosensor for lysozyme detection**  
 SAYLAN Y., YILMAZ F., Derazshamshir A., DENİZLİ A.  
*253rd National Meeting of the American-Chemical-Society (ACS) on Advanced Materials, Technologies, Systems, and Processes*, San-Francisco, Kostarika, 2 - 06 Nisan 2017, cilt.253
- II. Molecularly Imprinted Plasmonic Biosensors for Hemoglobin Detection**  
 SAYLAN Y., DENİZLİ A.  
*15th IEEE Sensors Conference*, Florida, Amerika Birleşik Devletleri, 30 Ekim - 02 Kasım 2016

## **Desteklenen Projeler**

GÖKTÜRK BAŞAL I., SAYLAN Y., YILMAZ F., Yükseköğretim Kurumları Destekli Proje, Kriyojeller ile Gıda Örneklerinden Seçici Olarak Kolesterol Uzaklaştırılması, 2018 - 2021

CİHANGİR N., Erdem Ö., SAYLAN Y., Yükseköğretim Kurumları Destekli Proje, Sularda Fekal Kirlilik Tayinine Yönelik Biyosensör Geliştirilmesi, 2019 - 2019

SAYLAN İNCİ Y., CİHANGİR N., Erdem Ö., Yükseköğretim Kurumları Destekli Proje, Yüzey Plazmon Rezonans Sensör Uygulamaları için Bakteri Yüzey Proteini Baskılanmış Nanopartiküllerin Hazırlanması, 2018 - 2019

SAYLAN İNCİ Y., GÖKTÜRK BAŞAL I., Yükseköğretim Kurumları Destekli Proje, Moleküller Baskılanmış Manyetik Bakteriyel Selüloz Nanofiberler ile Nükleozid Saflaştırılması, 2018 - 2019

CİHANGİR N., ERDEM Ö., SAYLAN Y., Yükseköğretim Kurumları Destekli Proje, Sularda Fekal Kirlilik Tayinine Yönelik Sensör Geliştirilmesi, 2017 - 2018

SAYLAN İNCİ Y., DENİZLİ A., Yükseköğretim Kurumları Destekli Proje, Protein Tayini için Moleküller Baskılanmış Yüzey Plazmon Rezonans Nanosensörleri Hazırlanması, 2017 - 2017

DENİZLİ A., SAYLAN Y., Yükseköğretim Kurumları Destekli Proje, Lizozim Tayini için Hidrofobik Temelli Yüzey Plazmon Rezonans Biyosensörlerin Hazırlanması, 2017 - 2017

DENİZLİ A., SAYLAN Y., Yükseköğretim Kurumları Destekli Proje, Hemoglobin Tayini için Moleküller Baskılanmış Plazmonik Biyosensörler, 2016 - 2017

SAYLAN İNCİ Y., Yükseköğretim Kurumları Destekli Proje, Hasta başında teşhis için plazmonik temelli mikroakisikan biyosensörler, 2015 - 2016

SAYLAN İNCİ Y., Yükseköğretim Kurumları Destekli Proje, Romatoid Artrit Hastalığı Teşhisi için Yüzey Plazmon Rezonans Temelli Biyosensörlerin Hazırlanması, 2015 - 2015

## **Metrikler**

Yayın: 61

Atıf (WoS): 694

Atıf (Scopus): 951

H-İndeks (WoS): 14

H-İndeks (Scopus): 15

## **Akademi Dışı Deneyim**

Harvard Üniversitesi

Stanford Üniversitesi