

## Asst. Prof. YEŞEREN SAYLAN İNCİ

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Hacettepe University, Fen Bilimleri, Kimya, Turkey 2012 - 2017

Postgraduate, Hacettepe University, Fen Bilimleri, Kimya, Turkey 2009 - 2012

Undergraduate, Hacettepe University, Fen Fakültesi, Kimya, Turkey 2003 - 2008

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

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

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

### Research Areas

Chemistry, Biochemistry, Protein Chemistry, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2020 - Continues

Research Assistant PhD, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2017 - 2020

Research Assistant, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2010 - 2017

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

- 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)

- II. **Recent Advances of Optical Sensors for Copper Ion Detection**  
Gerdan Z., Saylan Y., Denizli A.  
MICROMACHINES, vol.13, no.8, 2022 (SCI-Expanded)
- III. **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, vol.12, no.7, 2022 (SCI-Expanded)
- IV. **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, vol.201, 2022 (SCI-Expanded)
- V. **Ion-Imprinted Polymer-on-a-Sensor for Copper Detection**  
Gerdan Z., SAYLAN İNCİ Y., Ugur M., DENİZLİ A.  
BIOSENSORS-BASEL, vol.12, no.2, 2022 (SCI-Expanded)
- VI. **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, vol.11, no.9, 2021 (SCI-Expanded)
- VII. **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, vol.6, no.7, 2021 (SCI-Expanded)
- VIII. **Designing composite cryogel carriers for tyrosine adsorption**  
Ozturk G., SAYLAN Y., DENİZLİ A.  
SEPARATION AND PURIFICATION TECHNOLOGY, vol.254, 2021 (SCI-Expanded)
- IX. **Comparison of molecularly imprinted plasmonic nanosensor performances for bacteriophage detection**  
Erdem O., CİHANGİR N., SAYLAN Y., DENİZLİ A.  
NEW JOURNAL OF CHEMISTRY, vol.44, no.41, pp.17654-17663, 2020 (SCI-Expanded)
- X. **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)
- XI. **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, vol.31, no.9, pp.1211-1222, 2020 (SCI-Expanded)
- XII. **Advances in Molecularly Imprinted Systems: Materials, Characterization Methods and Analytical Applications**  
SAYLAN Y., DENİZLİ A.  
CURRENT ANALYTICAL CHEMISTRY, vol.16, no.3, pp.196-207, 2020 (SCI-Expanded)
- XIII. **Molecularly Imprinted Polymer-Based Microfluidic Systems for Point-of-Care Applications**  
SAYLAN Y., DENİZLİ A.  
MICROMACHINES, vol.10, no.11, 2019 (SCI-Expanded)
- XIV. **Detecting Fingerprints of Waterborne Bacteria on a Sensor**  
SAYLAN Y., Erdem O., CİHANGİR N., DENİZLİ A.  
CHEMOSENSORS, vol.7, no.3, 2019 (SCI-Expanded)
- XV. **An Alternative Medical Diagnosis Method: Biosensors for Virus Detection**  
SAYLAN Y., Erdem O., ÜNAL S., DENİZLİ A.  
BIOSENSORS-BASEL, vol.9, no.2, 2019 (SCI-Expanded)
- XVI. **Molecularly Imprinted Polymer Based Sensors for Medical Applications**  
SAYLAN Y., Akgonullu S., Yavuz H., ÜNAL S., DENİZLİ A.  
SENSORS, vol.19, no.6, 2019 (SCI-Expanded)
- XVII. **Molecularly imprinted nanoparticles based plasmonic sensors for real-time Enterococcus faecalis detection**

- Erdem O, SAYLAN Y, CİHANGİR N, DENİZLİ A.  
BIOSENSORS & BIOELECTRONICS, vol.126, pp.608-614, 2019 (SCI-Expanded)
- XVIII. **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, pp.1-12, 2019 (SCI-Expanded)
- XIX. **Molecular Fingerprints of Hemoglobin on a Nanofilm Chip**  
SAYLAN Y, DENİZLİ A.  
SENSORS, vol.18, no.9, 2018 (SCI-Expanded)
- XX. **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, Yuksekkaya M, Filippini C, Kumar D. K., et al.  
ADVANCED SCIENCE, vol.5, no.9, 2018 (SCI-Expanded)
- XXI. **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, vol.30, no.9, 2017 (SCI-Expanded)
- XXII. **Molecular Imprinting of Macromolecules for Sensor Applications**  
SAYLAN Y, Yilmaz F, ÖZGÜR E, DERAZSHAMSHIR A, Yavuz H, DENİZLİ A.  
SENSORS, vol.17, no.4, 2017 (SCI-Expanded)
- XXIII. **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, vol.241, pp.446-454, 2017 (SCI-Expanded)
- XXIV. **Recognition of lysozyme using surface imprinted bacterial cellulose nanofibers**  
SAYLAN Y, Tamahkar E, DENİZLİ A.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.28, no.16, pp.1950-1965, 2017 (SCI-Expanded)
- XXV. **Surface plasmon resonance sensors for real-time detection of cyclic citrullinated peptide antibodies**  
DİBEKKAYA H, SAYLAN Y, Yilmaz F, DERAZSHAMSHIR A, DENİZLİ A.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.53, no.9, pp.585-594, 2016 (SCI-Expanded)
- XXVI. **Alanine Functionalized Magnetic Nanoparticles for Reversible Amyloglucosidase Immobilization**  
SAYLAN Y, UZUN L, DENİZLİ A.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.54, no.1, pp.454-461, 2015 (SCI-Expanded)
- XXVII. **Surface imprinting approach for preparing specific adsorbent for IgG separation**  
SAYLAN Y, ÜZEK R, UZUN L, DENİZLİ A.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.25, no.9, pp.881-894, 2014 (SCI-Expanded)
- XXVIII. **Monolithic Boronate Affinity Columns for IgG Separation**  
SAYLAN Y, BERELİ N, UZUN L, DENİZLİ A.  
SEPARATION SCIENCE AND TECHNOLOGY, vol.49, no.10, pp.1555-1565, 2014 (SCI-Expanded)
- XXIX. **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, vol.32, no.4, pp.937-944, 2012 (SCI-Expanded)
- XXX. **L-Histidine imprinted supermacroporous cryogels for protein recognition**  
BERELİ N, SAYLAN Y, UZUN L, Say R, DENİZLİ A.  
SEPARATION AND PURIFICATION TECHNOLOGY, vol.82, pp.28-35, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Advances in Biomimetic Systems for Molecular Recognition and Biosensing**  
SAYLAN Y., Erdem O., Inci F., DENİZLİ A.  
BIOMIMETICS, vol.5, no.2, 2020 (ESCI)
- II. **Supermacroporous Composite Cryogels in Biomedical Applications**  
SAYLAN Y., DENİZLİ A.  
GELS, vol.5, no.2, 2019 (ESCI)
- III. **Molecularly Imprinted Polymers for Removal of Metal Ions: An Alternative Treatment Method**  
ERDEM Ö., SAYLAN Y., ANDAÇ ÖZDİL A. M., DENİZLİ A.  
biomimetics, 2018 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Mass-sensitive based biosensors**  
ÖZGÜR E., SAYLAN İNCİ Y., AKGÖNÜLLÜ S., DENİZLİ A.  
in: Biosensors: Fundamentals, Emerging Technologies, and Applications, , Editor, CRC Press, pp.89-104, 2022
- II. **Virus-Based Nanocarriers for Targeted Drug Delivery**  
AKGÖNÜLLÜ S., Bakhshpour M., SAYLAN Y., DENİZLİ A.  
in: Viral and Antiviral Nanomaterials Synthesis, Properties, Characterization, and Application, Devarajan Thangadurai, Saher Islam, Charles Oluwaseun Adetunji, Editor, CRC Press, Boca Raton, pp.173-191, 2022
- III. **Imprinted polymers in biosensors**  
SAYLAN İNCİ Y., AKGÖNÜLLÜ S., BERELİ N., DENİZLİ A.  
in: Biosensors: Fundamentals, Emerging Technologies, and Applications, , Editor, CRC Press, pp.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.  
in: Advanced Biosensors for Virus Detection Smart Diagnostics to Combat SARS-CoV-2, , Editor, Academic Press , pp.407-421, 2022
- V. **Nanosensors for smartphone-enabled sensing devices**  
SAYLAN İNCİ Y., AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.  
in: Nanotechnology-Based Smart Remote Sensing Networks for Disaster Prevention, , Editor, Elsevier, pp.85-1104, 2022
- VI. **Nanosensors for smartphone-enabled sensing devices**  
SAYLAN Y., AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.  
in: Nanotechnology-Based Smart Remote Sensing Networks for Disaster Prevention, , Editor, Elsevier, pp.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.  
in: Plasmonic Sensors and their Applications, Adil Denizli, Editor, Wiley, Weinheim, pp.71-85, 2021
- VIII. **Plasmonic Smart Nanosensors for the Determination of Environmental Pollutants**  
SAYLAN Y., YILMAZ F., ÖZGÜR E., DERAZSHAMSHIR A., DENİZLİ A.  
in: Emerging Carbon-Based Nanocomposites for Environmental Applications, Ajay Kumar Mishra Chaudhery Mustansar Hussain Shivani Bhardwaj Mishra, Editor, Scrivener Publishing / Wiley, pp.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.  
in: Controlled Release of Pesticides for Sustainable Agriculture, Rakhimol K. R., Sabu Thomas, Tatiana Volova Jayachandran K, Editor, Springer, London/Berlin , Zürich, pp.207-235, 2019
- X. **MASS TRANSFER IN CRYOGELS**  
BATTAL D., AKGÖNÜLLÜ S., ÇİMEN D., SAYLAN Y., ASLIYÜCE ÇOBAN S., DENİZLİ A.  
in: CRYOGELS AND MONOLITHS, MATTIASSON B., DENİZLİ A., Editor, PALME DİZGİ-GRAFİK BİRİMİ, Ankara,

pp.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.

in: Nanotechnology Characterization Tools for Biosensing and Medical Diagnosis, Kumar, C.S.S.R., Editor, Springer Berlin Heidelberg, pp.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.

in: New Pesticides and Soil Sensors, Alexandru Mihai Grumezescu, Editor, Academic Press, pp.679-718, 2017

## Refereed Congress / Symposium Publications in Proceedings

**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, Costa Rica, 2 - 06 April 2017, vol.253

**II. Molecularly Imprinted Plasmonic Biosensors for Hemoglobin Detection**

SAYLAN Y., DENİZLİ A.

15th IEEE Sensors Conference, Florida, United States Of America, 30 October - 02 November 2016

## 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

ÇİHANGİR N., Erdem Ö., SAYLAN Y., Project Supported by Higher Education Institutions, Sularda Fekal Kirlilik Tayinine Yönelik Biyosensör Geliştirilmesi, 2019 - 2019

SAYLAN İNCİ Y., ÇİHANGİR N., Erdem Ö., Project Supported by Higher Education Institutions, Yüzeysel Plazmon Rezonans Sensör Uygulamaları için Bakteri Yüzeysel Proteinini Baskılanmış Nanopartiküllerin Hazırlanması, 2018 - 2019

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

ÇİHANGİR N., ERDEM Ö., SAYLAN Y., Project Supported by Higher Education Institutions, Sularda Fekal Kirlilik Tayinine Yönelik Sensör Geliştirilmesi, 2017 - 2018

SAYLAN İNCİ Y., DENİZLİ A., Project Supported by Higher Education Institutions, Protein Tayini için Moleküler Baskılanmış Yüzeysel Plazmon Rezonans Nanosensörleri Hazırlanması, 2017 - 2017

DENİZLİ A., SAYLAN Y., Project Supported by Higher Education Institutions, Lizozim Tayini için Hidrofobik Temelli Yüzeysel Plazmon Rezonans Biyosensörlerin Hazırlanması, 2017 - 2017

DENİZLİ A., SAYLAN Y., Project Supported by Higher Education Institutions, Hemogloblin Tayini için Moleküler Baskılanmış Plazmonik Biyosensörler, 2016 - 2017

SAYLAN İNCİ Y., Project Supported by Higher Education Institutions, Hasta başında teşhis için plazmonik temelli mikroakışkan biyosensörler, 2015 - 2016

SAYLAN İNCİ Y., Project Supported by Higher Education Institutions, Romatoid Artrit Hastalığı Teşhisi için Yüzeysel Plazmon Rezonans Temelli Biyosensörlerin Hazırlanması, 2015 - 2015

## Metrics

Publication: 52

Citation (WoS): 689

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H-Index (Scopus): 15