

## Assoc. Prof. ERDOĞAN ÖZGÜR

### Personal Information

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### International Researcher IDs

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Yoksis Researcher ID: 126747

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri, Kimya, Turkey 2011 - 2016

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya Anabilim Dalı/Biyokimya, Turkey 2008 - 2011

Undergraduate, Hacettepe University, Ortaöğretim Fen Ve Matematik Alanları, Kimya Öğretmenliği, Turkey 2003 - 2008

### Research Areas

Chemistry, Biochemistry, Biophysical Chemistry, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2021 - Continues

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

- I. **PolyPyrrole based-impedimetric aptasensor for selective determination of beta-HCG from urine sample**  
Deniz A., Karasu T., ÖZGÜR E., UZUN L.  
BIOELECTROCHEMISTRY, 2025 (SCI-Expanded)
- II. **A molecularly imprinted polymer-based detection platform confirmed through molecular modeling for the highly sensitive and selective analysis of ipratropium bromide**  
Piskin E., Cetinkaya A., Unal M. A., ÖZGÜR E., Atici E. B., UZUN L., ÖZKAN S. A.  
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, 2024 (SCI-Expanded)
- III. **Conducting polymers as a functional recognition interface to design sensors for pathogen and cancer diagnosis**  
Karasu T., ARMUTCU ÇORMAN C., Elkhoury K., ÖZGÜR E., Maziz A., UZUN L.  
TrAC - Trends in Analytical Chemistry, vol.175, 2024 (SCI-Expanded)
- IV. **Pseudomonas aeruginosa imprinted polydopamine@graphene-coated pencil graphite electrode for selective bacterial detection**  
Karasu T., İDİL N., ÖZGÜR E., UZUN L.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.681, 2024 (SCI-Expanded)
- V. **Selective aptasensor for trinitrotoluene detection: Comparison of the detecting performances from liquid and vapor phases**  
ARMUTCU ÇORMAN C., Karasu T., Pişkin S., ÖZGÜR E., UZUN L.

Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.676, 2023 (SCI-Expanded)

- VI. **Human periodontal ligament stem cells-derived exosomes-loaded hybrid hydrogel enhances the calvarial defect regeneration in middle-age rats**  
Isik M., VARGEL İ., ÖZGÜR E., Cam S. B., KORKUSUZ P., EMREGÜL E., ODABAŞ S., DERKUŞ B.  
Materials Today Communications, vol.36, 2023 (SCI-Expanded)
- VII. **Molecular imprinted based microcryogels for thrombin purification**  
Asena Özbek M., ÖZGÜR E., BERELİ N., DENİZLİ A.  
Journal of chromatography. B, Analytical technologies in the biomedical and life sciences, vol.1228, pp.123848, 2023 (SCI-Expanded)
- VIII. **Highly Selective Benzo[a]Pyrene Detection Even under Competitive Conditions with Molecularly Imprinted Surface Plasmon Resonance Sensor**  
Corman M. E., ARMUTCU ÇORMAN C., Karasu T., ÖZGÜR E., UZUN L.  
POLYCYCLIC AROMATIC COMPOUNDS, vol.43, no.5, pp.3896-3909, 2023 (SCI-Expanded)
- IX. **Inspirations of Biomimetic Affinity Ligands: A Review**  
TOPÇU A. A., Kilic S., ÖZGÜR E., TÜRKMEN D., DENİZLİ A.  
ACS OMEGA, vol.7, pp.32897-32907, 2022 (SCI-Expanded)
- X. **Quartz Crystal Microbalance-Based Aptasensors for Medical Diagnosis**  
AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.  
MICROMACHINES, vol.13, no.9, 2022 (SCI-Expanded)
- XI. **Diclofenac Imprinted Surface Plasmon Resonance (SPR) Based Sensor**  
Caktı K., ÖZGÜR E., BERELİ N., DENİZLİ A.  
CHEMISTRYSELECT, vol.7, no.18, 2022 (SCI-Expanded)
- XII. **The creation of selective imprinted cavities on quartz crystal microbalance electrode for the detection of melamine in milk sample**  
Comert S. C., ÖZGÜR E., UZUN L., ODABAŞI M.  
FOOD CHEMISTRY, vol.372, 2022 (SCI-Expanded)
- XIII. **Recent Advances in Quartz Crystal Microbalance Biosensors Based on the Molecular Imprinting Technique for Disease-Related Biomarkers**  
AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.  
CHEMOSENSORS, vol.10, no.3, 2022 (SCI-Expanded)
- XIV. **A porous molecularly imprinted nanofilm for selective and sensitive sensing of an anticancer drug ruxolitinib**  
corman M. E., Cetinkaya A., ÖZÇELİKAY G., ÖZGÜR E., Atici E. B., UZUN L., Ozkan S. A.  
ANALYTICA CHIMICA ACTA, vol.1187, 2021 (SCI-Expanded)
- XV. **Artificial Carbonic Anhydrase via the Molecular Imprinting Approach for Carbon Dioxide Bioconversion**  
ÖZGÜR E.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.60, no.24, pp.8714-8719, 2021 (SCI-Expanded)
- XVI. **Borate mineral loading into acrylic bone cements to gain cost-effectivity, enhanced antibacterial resistivity, and better cellular integration properties**  
Kaplan M., ÖZGÜR E., ERSOY O., Kehribar L., İDİL N., UZUN L.  
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.32, no.8, pp.980-993, 2021 (SCI-Expanded)
- XVII. **Bifunctional sharkskin mimicked chitosan/graphene oxide membranes: Reduced biofilm formation and improved cytocompatibility**  
Rostami S., Puza F., Ucak M., ÖZGÜR E., GÜL Ö., ERCAN U. K., GARİPCAN B.  
APPLIED SURFACE SCIENCE, vol.544, 2021 (SCI-Expanded)
- XVIII. **Interface imprinted polymers with well-oriented recognition sites for selective purification of hemoglobin**  
ARMUTCU ÇORMAN C., ÖZGÜR E., ÇORMAN M. E., UZUN L.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.197, 2021 (SCI-Expanded)
- XIX. **Phosphate Anion Imprinted Cryogel Cartridges for Selective Preconcentration of Phosphorylated**

**Amino Acids from Protein Lysate: An Alternative Sorbent for Proteome Analyses**

ARMUTCU ÇORMAN C., Tartan C., ÖZGÜR E., NEMUTLU E., UZUN L.

CHEMISTRYSELECT, vol.5, no.38, pp.11730-11736, 2020 (SCI-Expanded)

- XX. **Lanthanide [Terbium(III)]-Doped Molecularly Imprinted Nanoarchitectures for the Fluorimetric Detection of Melatonin**  
ÖZGÜR E., Patra H. K., Turner A. P. F., DENİZLİ A., UZUN L.  
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, vol.59, no.36, pp.16068-16076, 2020 (SCI-Expanded)
- XXI. **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)
- XXII. **Immunoaffinity biosensor for neurofilament light chain detection and its use in Parkinson's diagnosis**  
ÖZGÜR E., Uyanık H. U., Senel S., UZUN L.  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.256, 2020 (SCI-Expanded)
- XXIII. **Surface plasmon resonance based biomimetic sensor for urinary tract infections**  
ÖZGÜR E., TOPÇU A. A., YILMAZ E., DENİZLİ A.  
TALANTA, vol.212, 2020 (SCI-Expanded)
- XXIV. **Molecular imprinted polymer based electrochemical sensor for selective detection of paraben**  
Yucebas B. B., YAMAN Y. T., BOLAT G., ÖZGÜR E., UZUN L., ABACI S.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.305, 2020 (SCI-Expanded)
- XXV. **Rapid Analysis of Polycyclic Aromatic Hydrocarbons in Water Samples Using an Automated On-line Two-Dimensional Liquid Chromatography**  
Armutcu C., ÖZGÜR E., Karasu T., Bayram E., UZUN L., Corman M. E.  
WATER AIR AND SOIL POLLUTION, vol.230, no.10, 2019 (SCI-Expanded)
- XXVI. **Design and preparation of imprinted surface plasmon resonance (SPR) nanosensor for detection of Zn(II) ions**  
Jalilzadeh M., ÇİMEN D., ÖZGÜR E., ESEN C., DENİZLİ A.  
JOURNAL OF MACROMOLECULAR SCIENCE PART A-PURE AND APPLIED CHEMISTRY, vol.56, no.9, pp.877-886, 2019 (SCI-Expanded)
- XXVII. **A repertoire of biomedical applications of noble metal nanoparticles**  
Azharuddin M., Zhu G. H., Das D., ÖZGÜR E., UZUN L., Turner A. P. F., Patra H. K.  
CHEMICAL COMMUNICATIONS, vol.55, no.49, pp.6964-6996, 2019 (SCI-Expanded)
- XXVIII. **Real time monitoring and label free creatinine detection with artificial receptors**  
Topcu A. A., ÖZGÜR E., Yilmaz F., BERELİ N., DENİZLİ A.  
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.244, pp.6-11, 2019 (SCI-Expanded)
- XXIX. **Quartz crystal microbalance based histidine sensor**  
Sonmezler M., ÖZGÜR E., Yavuz H., DENİZLİ A.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.47, no.1, pp.221-227, 2019 (SCI-Expanded)
- XXX. **Bioinspired design of a polymer-based biohybrid sensor interface**  
ÖZGÜR E., Parlak O., Beni V., Turner A. P. F., UZUN L.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.251, pp.674-682, 2017 (SCI-Expanded)
- XXXI. **Plastic antibody based surface plasmon resonance nanosensors for selective atrazine detection**  
Yilmaz E., ÖZGÜR E., BERELİ N., TÜRKMEN D., DENİZLİ A.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.73, pp.603-610, 2017 (SCI-Expanded)
- XXXII. **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)
- XXXIII. **Microcontact imprinted quartz crystal microbalance nanosensor for protein C recognition**

- Bakhshpour M., ÖZGÜR E., BERELİ N., DENİZLİ A.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.151, pp.264-270, 2017 (SCI-Expanded)
- XXXIV. **Molecularly Imprinted Quartz Crystal Microbalance Sensor (QCM) for Bilirubin Detection**  
ÇİÇEK Ç., YILMAZ F., ÖZGÜR E., Yavuz H., DENİZLİ A.  
CHEMOSENSORS, vol.4, no.4, 2016 (SCI-Expanded)
- XXXV. **PolyAdenine cryogels for fast and effective RNA purification**  
Kose K., Erol K., ÖZGÜR E., UZUN L., DENİZLİ A.  
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.146, pp.678-686, 2016 (SCI-Expanded)
- XXXVI. **Whole cell imprinting based Escherichia coli sensors: A study for SPR and QCM**  
YILMAZ E., Majidi D., ÖZGÜR E., DENİZLİ A.  
SENSORS AND ACTUATORS B-CHEMICAL, vol.209, pp.714-721, 2015 (SCI-Expanded)
- XXXVII. **A New Molecular Imprinting-Based Mass-Sensitive Sensor for Real-Time Detection of 17 beta-Estradiol from Aqueous Solution**  
Ozgur E., Yilmaz E., Sener G., UZUN L., Say R., DENİZLİ A.  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, vol.32, no.4, pp.1164-1169, 2013 (SCI-Expanded)
- XXXVIII. **Rapid real-time detection of procalcitonin using a microcontact imprinted surface plasmon resonance biosensor**  
ŞENER G., ÖZGÜR E., Rad A. Y., UZUN L., SAY R., DENİZLİ A.  
ANALYST, vol.138, no.21, pp.6422-6428, 2013 (SCI-Expanded)
- XXXIX. **PHEMA cryogel for in-vitro removal of anti-dsDNA antibodies from SLE plasma**  
ÖZGÜR E., BERELİ N., TÜRKMEN D., ÜNAL S., DENİZLİ A.  
MATERIALS SCIENCE & ENGINEERING C-MATERIALS FOR BIOLOGICAL APPLICATIONS, vol.31, no.5, pp.915-920, 2011 (SCI-Expanded)
- XL. **Quartz crystal microbalance based nanosensor for lysozyme detection with lysozyme imprinted nanoparticles**  
Sener G., Ozgur E., Yilmaz E., UZUN L., Say R., Denizli A.  
BIOSENSORS & BIOELECTRONICS, vol.26, no.2, pp.815-821, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Progress in conducting polymers for biointerfacing and biorecognition applications**  
Maziz A., ÖZGÜR E., Bergaud C., UZUN L.  
SENSORS AND ACTUATORS REPORTS, vol.3, 2021 (ESCI)

## 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. **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
- III. **Ultrasensitive Sensors Based o Plasmonic Nanoparticles**  
Denizli F., GÖKTÜRK BAŞAL I., ÖZGÜR E., YILMAZ F.  
in: Plasmonic Sensors and Their Applications, , Editor, WILEY-VCH GmbH, pp.171-188, 2022
- IV. **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

- V. **Gold Nanoparticles and Molecular Imprinting Technique**  
ÖZGÜR E., YILMAZ E., TOPÇU A. A., DENİZLİ A.  
in: Molecular Imprinting, , Editor, Hacettepe University Press, pp.33-46, 2019
- VI. **Molecularly Imprinted Nanomaterials: Applications in Biosensors and Biodiagnostics**  
YILMAZ E., ÖZGÜR E., ÇİMEN D., DENİZLİ A.  
in: Affinity Sensors, , Editor, Hacettepe University Press, pp.1-26, 2019
- VII. **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
- VIII. **Yüzey Plazmon Rezonans Sensörler**  
YILMAZ E., ÖZGÜR E., DENİZLİ A.  
in: Afinitive Temelli Biyosensörler, , Editor, Kukla, Ankara, pp.117-124, 2016

## Refereed Congress / Symposium Publications in Proceedings

- I. **Effective RNA Purification via Adenine Decorated Cryogels**  
KÖSE K., EROL K., ÖZGÜR E., UZUN L., DENİZLİ A.  
10th International Conference Structure and Stability of Biomacromolecules (SSB 2017), Koshice, Slovakia, 4 - 07 September 2017
- II. **Phenylalanine functionalized monolith coupled on-line with two-dimensional HPLC for simultaneous quantitative determination endocrine disruptors.**  
ARMUTCU ÇORMAN C., ÇORMAN M. E., ÖZGÜR E., BAYRAM E., UZUN L.  
AFFINITY 2017, Paris, France, 25 - 29 June 2017
- III. **Phenylalanine functionalized monolith coupled on-line with two-dimensional HPLC for simultaneous quantitative determination endocrine disruptors.**  
ARMUTCU ÇORMAN C., ÇORMAN M. E., ÖZGÜR E., BAYRAM E., UZUN L.  
AFFINITY 2017, Paris, France, 25 - 29 June 2017
- IV. **Smart polymerisable terbium III complex based fluorescent MIP nanoparticles**  
UZUN L., ÖZGÜR E., Patra H. K., Turner A. P.  
Biosensors 2016, 25 - 27 May 2016
- V. **Porous functional nanofilms for designing bioinspired sensor surfaces**  
ÖZGÜR E., Parlak O., UZUN L., Beni V., Turner A. P.  
Advanced Materials Wordl Congress 2015, 23 - 26 August 2015
- VI. **Microcontact imprinted surface plasmon resonance biosensor for rapid procalcitonin detection**  
ŞENER G., ÖZGÜR E., Rad A. Y., UZUN L., SAY R., DENİZLİ A.  
246th National Meeting of the American-Chemical-Society (ACS), Indiana, United States Of America, 8 - 12 September 2013, vol.246

## Supported Projects

- ÖZGÜR E., UZUN L., Project Supported by Higher Education Institutions, Karbondioksitin (CO<sub>2</sub>) Biyolojik Dönüşümüne Yönelik Biyouyumlu Yapay Karbonik Anhidraz, 2019 - 2021
- UZUN L., ÖZGÜR E., Yaman Y. T., Project Supported by Higher Education Institutions, Seçici Paraben Tayini İçin Moleküler Baskılanmış Elektrokimyasal Sensörlerin Geliştirilmesi, 2017 - 2018
- ŞENEL S., ÖZGÜR E., UZUN L., Project Supported by Higher Education Institutions, Nörofilament hafifi zinciri tayini için immunoafinite sensörün geliştirilmesi ve Parkinson tanısında kullanımının araştırılması, 2017 - 2017
- UZUN L., ÖZGÜR E., Project Supported by Higher Education Institutions, Biyoesinlenmiş Biyo-arayüzeylerin Biyosensör

ve Kontrollü Salm Özelliklerinin İncelenmesi, 2016 - 2017

ÖZGÜR E., TUBITAK Project, Melatonin Baskılanmış Floresan Nanopartiküllerin Tasarımı, Üretimi Ve Mevsimsel Duygusal Bozukluk Teşhisinde Kullanımının İncelenmesi, 2013 - 2014

## **Metrics**

Publication: 57

Citation (WoS): 493

Citation (Scopus): 1372

H-Index (WoS): 11

H-Index (Scopus): 18

## **Non Academic Experience**

Linköping University

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