

## Assoc. Prof. ERDOĞAN ÖZGÜR

### Personal Information

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### International Researcher IDs

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### 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. **Determination of capsaicinoids in chili peppers by soxhlet extraction-high performance liquid chromatography**  
GÜNDÜZ S., TÜYSÜZ M., ÖZGÜR E., ARMUTCU ÇORMAN C., ÇORMAN M. E., UZUN L.  
2. Euroasia Biochemical Approaches & Technologies, Antalya, Turkey, 26 - 29 October 2019
- II. **Cryogel-based phosphate imprinted column for phospho-amino acid preconcentration during proteomic analysis**  
ARMUTCU ÇORMAN C., TARTAN Ç., ÖZGÜR E., NEMUTLU E., UZUN L.  
26th Assembly of Advanced Materials Congress, Sweden, 10 - 13 June 2019
- III. **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
- IV. **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
- V. **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
- VI. **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
- VII. **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
- VIII. **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

Armutcu Çorman C., Özgür E., Ünal M. A., Doğan Topal B., Uzun L., Çorman M. E., Özkan S. A., TÜBİTAK International Bilateral Joint Cooperation Program Project, Buğdayda Aflatoksin ve Deoksinivalenol İçin Senkron İmmünoassay Teknikleri Üzerine Araştırma, 2022 - 2025

ÖZGÜR E., UZUN L., Project Supported by Higher Education Institutions, Karbondioksitin (CO<sub>2</sub>) Biyolojik Dönüşümüne Yönelik Biyoyumlu Yapay Karbonik Anhidraz, 2019 - 2021

UZUN L., ÖZGÜR E., Yaman Y. T., Project Supported by Higher Education Institutions, Seçici Paraben Tayini İçin Moleküler Basklanmış 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 Salım Özelliklerinin İncelenmesi, 2016 - 2017

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

## Metrics

Publication: 59

Citation (WoS): 493

Citation (Scopus): 1377

H-Index (WoS): 11

H-Index (Scopus): 18

## Non Academic Experience

Linköping University

Linköping University