

## Dr. Öğr. Üyesi Esra YÜCA YILMAZ

### Kişisel Bilgiler

E-posta: eyuca@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/eyuca>

Posta Adresi: Yıldız Teknik Üniversitesi Fen Edebiyat Fakültesi Moleküler Biyoloji ve Genetik Bölümü, Davutpaşa Kampüsü  
Esenler İstanbul

### Uluslararası Araştırmacı ID'leri

ORCID: 0000-0003-3189-6498

Publons / Web Of Science ResearcherID: AAZ-8909-2020

ScopusID: 37098428300

Yoksis Araştırmacı ID: 46360

### Eğitim Bilgileri

Doktora, İstanbul Teknik Üniversitesi, Moleküler Biyoloji-Biyoteknoloji Ve Genetik, Türkiye 2005 - 2011

### Araştırma Alanları

Biyomalzemeler, Nanomalzemeler, Yaşam Bilimleri, Biyoteknoloji, Biyosensör, Moleküler Biyoloji ve Genetik, Temel Bilimler

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

- I. **Highly Potent Peptide Therapeutics To Prevent Protein Aggregation in Huntington's Disease**  
Khan A., Özçelik C. E., Begli O., Oguz O., KESİCİ M. S., Kasırga T. S., ÖZÇUBUKÇU S., YÜCA YILMAZ E., Seker U. O. S.  
ACS Medicinal Chemistry Letters, cilt.14, sa.12, ss.1821-1826, 2023 (SCI-Expanded)
- II. **Study on the cytocompatibility, mechanical and antimicrobial properties of 3D printed composite scaffolds based on PVA/ Gold nanoparticles (AuNP)/ Ampicillin (AMP) for bone tissue engineering**  
Topsakal A., Midha S., YÜCA YILMAZ E., Tukay A., Sasmazel H. T., Kalaskar D. M., GÜNDÜZ O.  
Materials Today Communications, cilt.28, 2021 (SCI-Expanded)
- III. **Reconfigurable dual peptide tethered polymer system offers a synergistic solution for next generation dental adhesives**  
Yüca Yılmaz E., Xie S., Song L., Boone K., Kamathewatta N., Woolfolk S. K., Elrod P., Ye Q., Spencer P., Tamerler C.  
International Journal of Molecular Sciences, cilt.22, sa.12, 2021 (SCI-Expanded)
- IV. **Kinetic Release Studies of Antibiotic Patches for Local Transdermal Delivery.**  
Altun E., Yuca E., Ekren N., Kalaskar D. M., Fıcaı D., Dolete G., Fıcaı A., Gunduz O.  
Pharmaceutics, cilt.13, sa.5, 2021 (SCI-Expanded)
- V. **Interaction of microbial functional amyloids with solid surfaces**  
YÜCA YILMAZ E., Kehribar E. S., Seker U. O. S.  
COLLOIDS AND SURFACES B-BIOINTERFACES, cilt.199, 2021 (SCI-Expanded)
- VI. **Bioinspired multifunctional adhesive system for next generation bio-additively designed dental restorations**  
Sarıkaya R., Song L., Yuca E., Xie S., Boone K., Misra A., Spencer P., Tamerler C.

Journal of the Mechanical Behavior of Biomedical Materials, cilt.113, 2021 (SCI-Expanded)

VII. **Antimicrobial Peptide-Polymer Conjugates for Dentistry**

Xie S., Song L., Yuca E., Boone K., Sarikaya R., Vanoosten S. K., Misra A., Ye Q., Spencer P., Tamerler C.  
ACS APPLIED POLYMER MATERIALS, cilt.2, sa.3, ss.1134-1144, 2020 (SCI-Expanded)

VIII. **Biom mineralization of Calcium Phosphate Crystals Controlled by Protein-Protein Interactions**

Duman E., Kehribar E. S., Ahan R. E., Yüca E., Şeker U. Ö. Ş.  
ACS BIOMATERIALS SCIENCE & ENGINEERING, cilt.5, sa.9, ss.4750-4763, 2019 (SCI-Expanded)

IX. **Repeatedly Applied Peptide Film Kills Bacteria on Dental Implants**

Wisdom C., Chen C., Yuca E., Zhou Y., Tamerler C., Snead M. L.  
JOM, cilt.71, sa.4, ss.1271-1280, 2019 (SCI-Expanded)

X. **Self-Assembled Recombinant Proteins on Metallic Nanoparticles as Bimodal Imaging Probes**

Yuca E., Tamerler C.  
JOM, cilt.71, ss.1281-1290, 2019 (SCI-Expanded)

XI. **Peptide Mediated Antimicrobial Dental Adhesive System**

Xie S., Boone K., VanOosten S. K., Yuca E., Song L., Ge X., Ye Q., Spencer P., Tamerler C.  
APPLIED SCIENCES-BASEL, cilt.9, sa.3, 2019 (SCI-Expanded)

XII. **Self-assembly of bacterial amyloid protein nanomaterials on solid surfaces**

Onur T., Yuca E., Olmez T. T., Seker U. O. S.  
JOURNAL OF COLLOID AND INTERFACE SCIENCE, cilt.520, ss.145-154, 2018 (SCI-Expanded)

XIII. **Autonomous Synthesis of Fluorescent Silica Biodots Using Engineered Fusion Proteins**

Olmez T. T., Yuca E., Eyupoglu E., Catalak H. B., Sahin O., Seker U. O. S.  
ACS OMEGA, cilt.3, sa.1, ss.585-594, 2018 (SCI-Expanded)

XIV. **Engineered Peptide Repairs Defective Adhesive-Dentin Interface**

Ye Q., Spencer P., Yuca E., Tamerler C.  
MACROMOLECULAR MATERIALS AND ENGINEERING, cilt.302, sa.5, 2017 (SCI-Expanded)

XV. **Biosilver nanoparticle interface offers improved cell viability**

Vanoosten S. K., Yuca E., Karaca B. T., Boone K., Snead M. L., Spencer P., Tamerler C.  
SURFACE INNOVATIONS, cilt.4, sa.3, ss.121-132, 2016 (SCI-Expanded)

XVI. **Coupling Infusion and Gyration for the Nanoscale Assembly of Functional Polymer Nanofibers Integrated with Genetically Engineered Proteins**

Zhang S., Karaca B. T., VanOosten S. K., Yuca E., Mahalingam S., Edirisinghe M., Tamerler C.  
MACROMOLECULAR RAPID COMMUNICATIONS, cilt.36, sa.14, ss.1322-1328, 2015 (SCI-Expanded)

XVII. **Protein-mediated hydroxyapatite composite layer formation on nanotubular titania**

Utku F. S., Yuca E., Seckin E., Göller G., Karatas A. Y., Urgen M., Tamerler C.  
BIOINSPIRED BIOMIMETIC AND NANOBIOMATERIALS, cilt.4, sa.2, ss.155-165, 2015 (SCI-Expanded)

XVIII. **Addressable self-immobilization of lactate dehydrogenase across multiple length scales**

Cetinel S., Caliskan H. B., Yucesoy D. T., Donatan A. S., YÜCA E., Urgen M., Karaguler N. G., Tamerler C.  
BIOTECHNOLOGY JOURNAL, cilt.8, sa.2, ss.262-272, 2013 (SCI-Expanded)

XIX. **Multifunctional Protein-Enabled Patterning on Arrayed Ferroelectric Materials**

Hnilova M., Liu X., Yuca E., Jia C., Wilson B., Karataş A., Gresswell C., Ohuchi F., Kitamura K., Tamerler C.  
ACS APPLIED MATERIALS & INTERFACES, cilt.4, sa.4, ss.1865-1871, 2012 (SCI-Expanded)

XX. **Expression characteristics of ARF1 and SAR1 during development and the de-etiolation process**

Keskin B. C., Yüca E., Ertekin O., Yuksel B., Memon A. R.  
PLANT BIOLOGY, cilt.14, ss.24-32, 2012 (SCI-Expanded)

XXI. **In Vitro Labeling of Hydroxyapatite Minerals by an Engineered Protein**

Yuca E., Karatas A. Y., Seker U. O. S., Gungormus M., Dinler-Doganay G., Sarikaya M., Tamerler C.  
BIOTECHNOLOGY AND BIOENGINEERING, cilt.108, sa.5, ss.1021-1030, 2011 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Next-generation Antimicrobial Peptides (AMPs) incorporated nanofibre wound dressings**  
Afshar A., YÜCA YILMAZ E., Wisdom C., Alenezi H., Ahmet J., Tamerler C., Edirisinghe M.  
MEDICAL DEVICES & SENSORS, cilt.4, 2020 (Hakemli Dergi)
- II. **Comparative characterization of the hydrogel added PLA/ $\beta$ -TCP scaffolds produced by 3D bioprinting**  
Aydogdu M. O., Oner E. T., EKREN N., Erdemir G., Kuruca S. E., YÜCA E., Bostan M. S., EROĞLU M. S., Ikram F., UZUN M., et al.  
Bioprinting, cilt.13, 2019 (Scopus)

## **Kitaplar**

- I. **Design and construction of protein and peptide-based self-assembled nanostructures**  
Yüca Yılmaz E., Khan A., Haciosmanoğlu N., Şeker U. Ö. Ş.  
Design, Principle and Application of Self-Assembled Nanobiomaterials in Biology and Medicine, Alok Pandya, Rajesh Bhosale, Vijai Singh, Editör, Academic Press , London, ss.193-204, 2022
- II. **Monitoring Molecular Assembly of Biofilms Using Quartz Crystal Microbalance with Dissipation**  
Yüca Yılmaz E., Şeker U. Ö. Ş.  
Bacterial Amyloids, Véronique Arluison, Frank Wien, Andrés Marcoleta, Editör, Humana Press, Inc. , New York, ss.25-33, 2022
- III. **Chimeric biomolecules: Biomolecular recognition-based self-organization at the bio-material interfaces**  
Yuca E., Utku F. S., Spencer P., Tamerler C.  
Material-Tissue Interfacial Phenomena, Spencer P., Misra A., Editör, Elsevier Science, Oxford/Amsterdam , Massachusetts, ss.285-324, 2016

## **Metrikler**

Yayın: 38

Atf (WoS): 424

Atf (Scopus): 526

H-İndeks (WoS): 13

H-İndeks (Scopus): 14