

## **Lect. PhD MENEKŞE ERMİŞ ŞEN**

### **Personal Information**

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### **International Researcher IDs**

ORCID: 0000-0002-2108-9812

Publons / Web Of Science ResearcherID: A-1833-2019

Yoksis Researcher ID: 282619

### **Education Information**

Doctorate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Biomedical Engineering, Turkey 2012 - 2016

Undergraduate, Hacettepe University, Tıp Fakültesi (İngilizce), Turkey 2002 - 2009

### **Foreign Languages**

English, C2 Mastery

### **Certificates, Courses and Trainings**

Vocational Training, 3D Printing of Biomaterials, Hebrew University of Jerusalem, Casali Institute of Applied Chemistry, 2019

Vocational Training, Yarı iletken çiplerin üretimi, Semiconductor Production Systems B.V. (S.P.S.), Putten, Hollanda , 2018

Vocational Training, Erasmus+ Staff Mobility Training-3D Printing of Biomaterials, Hebrew University of Jerusalem Casali institute of Applied Chemistry, Israel, 2017

Vocational Training, Bilimsel Araştırmalarda Deney Hayvanlarının Kullanımına Ait Sertifika Programı, Kobay Deney Hayvanları Laboratuvarı A.Ş., 2013

Vocational Course, MATLAB Fundamentals, FIGES Engineering, 2012

Vocational Course, Atomic Force Microscopy, Tekno-Tıp Analitik Sistemler, 2012

### **Dissertations**

Doctorate, Influence of micropatterned polymeric substrates on cancer cell behavior, Middle East Technical University, Graduate School of Natural and Applied Sciences, Biomedical Engineering, 2016

## Research Areas

Biomedical Engineering, Life Sciences

## Academic Titles / Tasks

Lecturer PhD, Middle East Technical University, Presidency Office, 2018 - Continues

## Courses

Human Physiology, Postgraduate, 2019 - 2020

SPECIAL TOPICS IN ES/INTRO.TO BIOENGINEERING, Undergraduate, 2019 - 2020

## Advising Theses

Ermis Şen M., Tezcaner A., Development of a Multilayered Skin Model Using 3D Printing and Microfluidic Systems, Postgraduate, F.CAN(Student), 2021

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

- I. **Gelatin methacryloyl and Laponite bioink for 3D bioprinted organotypic tumor modeling**  
de Barros N. R., Gomez A., Ermis M., Falcone N., Haghniaz R., Young P., Gao Y., Aquino A., Li S., Niu S., et al.  
Biofabrication, vol.15, no.4, 2023 (SCI-Expanded)
- II. **Vascularized adipose tissue engineering: moving towards soft tissue reconstruction**  
Peirsman A., Nguyen H. T., Van Waeyenberge M., Ceballos C., Bolivar J., Kawakita S., Vanlauwe F., Tirpáková Z., Van Dorpe S., Van Damme L., et al.  
Biofabrication, vol.15, no.3, 2023 (SCI-Expanded)
- III. **Nuclear Deformability of Breast Cells Analyzed from Patients with Malignant and Benign Breast Diseases**  
Antmen E., Ermis M., Kuren O., Beksac K., Irkkan C., HASIRCI V. N.  
ACS BIOMATERIALS SCIENCE & ENGINEERING, vol.9, pp.1629-1643, 2023 (SCI-Expanded)
- IV. **A Cell Culture Chip with Transparent, Micropillar-Decorated Bottom for Live Cell Imaging and Screening of Breast Cancer Cells**  
Ermis M., ANTMEN ALTUNSOY E., Kuren O., Demirci U., Hasirci V.  
MICROMACHINES, vol.13, no.1, 2022 (SCI-Expanded)
- V. **Photo-crosslinked gelatin methacrylate hydrogels with mesenchymal stem cell and endothelial cell spheroids as soft tissue substitutes**  
Ermis M.  
JOURNAL OF MATERIALS RESEARCH, vol.36, no.1, pp.176-190, 2021 (SCI-Expanded)
- VI. **In situ silver nanoparticle synthesis on 3D-printed polylactic acid scaffolds for biomedical applications**  
ÇALAMAK S., Ermis M.  
JOURNAL OF MATERIALS RESEARCH, vol.36, no.1, pp.166-175, 2021 (SCI-Expanded)
- VII. **A Circulating Bioreactor Reprograms Cancer Cells Toward a More Mesenchymal Niche**  
Calamak S., Ermis M., Sun H., Islam S., Sikora M., Nguyen M., Hasirci V., Steinmetz L. M., Demirci U.  
ADVANCED BIOSYSTEMS, vol.4, no.2, 2020 (SCI-Expanded)
- VIII. **Square prism micropillars on poly(methyl methacrylate) surfaces modulate the morphology and differentiation of human dental pulp mesenchymal stem cells**  
Hasturk O., Ermis M., Demirci U., Hasirci N., Hasirci V.

Colloids and Surfaces B: Biointerfaces, vol.178, pp.44-55, 2019 (SCI-Expanded)

**IX. Engineered natural and synthetic polymer surfaces induce nuclear deformation in osteosarcoma cells**

Antmen E., ERMİŞ ŞEN M., Demirci U., HASIRCI V. N.

JOURNAL OF BIOMEDICAL MATERIALS RESEARCH PART B-APPLIED BIOMATERIALS, vol.107, no.2, pp.366-376, 2019 (SCI-Expanded)

**X. Micro and Nanofabrication methods to control cell-substrate interactions and cell behavior: A review from the tissue engineering perspective**

ERMİŞ ŞEN M., Antmen E., HASIRCI V. N.

BIOACTIVE MATERIALS, vol.3, no.3, pp.355-369, 2018 (SCI-Expanded)

**XI. Modified chitosan scaffolds: Proliferative, cytotoxic, apoptotic, and necrotic effects on Saos-2 cells and antimicrobial effect on Escherichia coli**

Ucar Ş., ERMİŞ ŞEN M., Hasirci N.

JOURNAL OF BIOACTIVE AND COMPATIBLE POLYMERS, vol.31, no.3, pp.304-319, 2016 (SCI-Expanded)

## Books & Book Chapters

**I. Hydrogels as a New Platform to Recapitulate the Tumor Microenvironment (Chapter 15)**

ERMİŞ ŞEN M., ÇALAMAK S., ÇALIBAŞI G., GÜVEN S., Durmuş N. G., Rizvi I., Hasan T., HASIRCI N., HASIRCI V. N., Demirci U.

in: Handbook of Nanomaterials for Cancer Theranostics, João Conde, Editor, Elsevier, Cambridge, pp.463-494, 2018

## Refereed Congress / Symposium Publications in Proceedings

**I. NUCLEUS DEFORMATION ON MICROPATTERNED SUBSTRATES: A TOOL TO QUANTIFY NUCLEAR DEFORMABILITY OF CANCER CELLS**

ERMİŞ ŞEN M., AKKAYNAK D., CHEN P., DEMİRCİ U., HASIRCI V. N.

IBMEC'18, Second International Biomedical Engineering Conference, Cyprus (Kktc), 24 - 27 May 2018

## Metrics

Publication: 17

Citation (WoS): 178

Citation (Scopus): 46

H-Index (WoS): 4

H-Index (Scopus): 3

## Scholarships

2211-C Yurt İçi Öncelikli Alanlar Doktora Burs Programı, TUBITAK, 2014 - 2016