### Asst. Prof. BENAY UZER YILMAZ

### **Personal Information**

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### **Education Information**

Doctorate, Koc University, Faculty Of Engineering, Makine Mühendisliği, Turkey 2013 - 2017 Undergraduate, Koc University, Faculty Of Engineering, Makine Mühendisliği, Turkey 2008 - 2013

### Foreign Languages

English, C1 Advanced

### **Research Areas**

Metallurgical and Materials Engineering, Material science and engineering, Biomaterials, Material Characterization, Metallic Materials, Engineering and Technology

## **Academic Titles / Tasks**

Assistant Professor, Abdullah Gul University, Mühendislik Fakültesi, Makine Mühendisliği, 2017 - Continues Researcher, Texas A&M University, Engineering, Material Science And Engineering, 2016 - 2017

# Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Abdullah Gul University, Mühendislik Fakültesi, Makine Mühendisliği, 2018 - Continues Deputy Head of Department, Abdullah Gul University, Mühendislik Fakültesi, Makine Mühendisliği, 2018 - Continues

### **Courses**

Metallic Biomaterials, Undergraduate, 2020 - 2021 Metallic Biomaterials, Postgraduate, 2019 - 2020

Published journal articles indexed by SCI, SSCI, and AHCI

I. Modulating the Surface Properties of Metallic Implants and the Response of Breast Cancer Cells by Surface Relief Induced via Bulk Plastic Deformation

UZER YILMAZ B.

FRONTIERS IN MATERIALS, vol.7, 2020 (SCI-Expanded)

II. Nanotwin Formation in High-Manganese Austenitic Steels Under Explosive Shock Loading

Canadinc D., UZER B., Elmadagli M., Guner F.

METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, no.4,

III. On the mechanical response and microstructure evolution of NiCoCr single crystalline medium entropy alloys

UZER B., Picak S., Liu J., Jozaghi T., Canadinc D., Karaman I., Chumlyakov Y. I., Kireeva I.

MATERIALS RESEARCH LETTERS, vol.6, no.8, pp.442-449, 2018 (SCI-Expanded)

IV. An exploration of plastic deformation dependence of cell viability and adhesion in metallic implant materials

Uzer B., Toker S. M., Cingoz A., Bagci-Onder T., Gerstein G., Maier H. J., Canadinc D.

JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS, vol.60, pp.177-186, 2016 (SCI-Expanded)

## Articles Published in Other Journals

pp.1026-1030, 2018 (SCI-Expanded)

I. Investigation of the Dissolution-Reformation Cycle of the Passive Oxide Layer on NiTi Orthodontic Archwires

Uzer B., Birer O., Canadinc D.

SHAPE MEMORY AND SUPERELASTICITY, vol.3, no.3, pp.264-273, 2017 (ESCI)

II. A Critical Approach to the Biocompatibility Testing of Niti Orthodontic Archwires UZER B., CANADİNÇ D., TOKER S. M., POLAT ALTINTAŞ S.

International Journal of Metallurgy and Metal Physics, 2016 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

I. The relationship of surface roughness and wettability of 316L stainless steel implants with plastic deformation mechanisms

Cicek S., Karaca A., TÖRÜN İ., ÖNSES M. S., Uzer B.

1st International Conference on Materials, Mimicking, Manufacturing from and for Bio Application, BioM and M 2018, Milan, Italy, 27 - 29 June 2018, vol.7, pp.389-393

II. The role of twinning in the deformation of single crystalline high- and medium entropy alloys Picak S., UZER B.

1st International Symposium on Light Alloys and Composite Materials (ISLAC'18), Karabük, Turkey, 22 - 24 March 2018, pp.1

III. The Influence of Plastic Deformation Mechanisms on the Adhesion Behavior and Collagen Formation in Osteoblast Cells

UZER B., CANADİNÇ D., varanasi v., monte f.

TMS 2018, 11 - 13 March 2018

IV. THE EFFECT OF PLASTIC DEFORMATION ON THE CELL VIABILITY AND ADHESION BEHAVIOR IN METALLIC IMPLANT MATERIALS

UZER B.

MST 2016, 26 - 28 October 2016

V. Surface characteristic dependent ex situ and in vitro biocompatibility analysis ofNiTi alloys TOKER S. M., UZER B., CANADİNÇ D.

# Scientific Refereeing

 $ACS\ BIOMATERIALS\text{-}SCIENCE\ \&\ ENGINEERING, Journal\ Indexed\ in\ SCI\text{-}E,\ December\ 2019$ 

# **Metrics**

Publication: 11 Citation (WoS): 41 Citation (Scopus): 43 H-Index (WoS): 3 H-Index (Scopus): 3