### Asst. Prof. MUHAMMET TAHA ACAR

#### Personal Information

Email: taha.acar@erzincan.edu.tr

Web: https://avesis.ebyu.edu.tr/taha.acar

#### International Researcher IDs

ORCID: 0000-0002-8367-9623

Publons / Web Of Science ResearcherID: GSJ-0464-2022

Yoksis Researcher ID: 247259

### **Education Information**

Doctorate, Ataturk University, Turkey 2018 - 2022 Postgraduate, Ataturk University, Turkey 2016 - 2018

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

I. Selective laser melting of Ti6Al4V alloy: Effects of graphene-TiO2 nanotubes composites corrosion and biocompatibility

ACAR M. T., Çomaklı O., Arslan M.

Journal of Alloys and Compounds, vol.1008, 2024 (SCI-Expanded)

II. Comparative investigation of structural, morphological, mechanical, tribological and electrochemical properties of TiO2 films formed on Cp-Ti, Ti6Al4V and Ti45Nb alloys

KOVACI H., Şenel K., ACAR M. T., BOZKURT Y. B., ÇELİK A.

Surface and Coatings Technology, vol.487, 2024 (SCI-Expanded)

III. The effect of doping different amounts of boron on the corrosion resistance and biocompatibility of TiO2 nanotubes synthesized on SLM Ti6Al4V samples

ACAR M. T., Çomaklı O., Yazıcı M., Arslan M., Yetim A., ÇELİK A.

Surfaces and Interfaces, vol.50, 2024 (SCI-Expanded)

IV. Analyzing the corrosion and tribocorrosion performances of monolayer TiO2 and bilayer TiO2-SiO2 coatings at different SBF temperatures

ACAR M. T.

Physica Scripta, vol.99, no.2, 2024 (SCI-Expanded)

V. Investigation of surface wettability, corrosion and tribocorrosion behavior of machined, etched, blasted and anodized Cp-Ti samples

ACAR M. T.

MRS Communications, vol.13, no.4, pp.587-593, 2023 (SCI-Expanded)

# Articles Published in Other Journals

I. Mutual examination of corrosion and wear resistance of sandblasting and etching surface treatments applied to AISI 316L stainless steel

ACAR M. T.

European Mechanical Science, vol.8, 2024 (Peer-Reviewed Journal)

II. Investigation of monolayer anodized TiO2 film and bilayer spin coated graphene film on corrosion and tribocorrosion properties of Ti45Nb alloy

ACAR M. T.

European Mechanical Science, vol.8, 2024 (Peer-Reviewed Journal)

III. Investigation of the effects of Sr and Mn doping on corrosion tribocorrosion and cyclic voltammetry performances of TiO2 nanotubes

ACAR M. T.

European Mechanical Science, vol.7, 2023 (Peer-Reviewed Journal)

# Refereed Congress / Symposium Publications in Proceedings

 Effect of potassium fluoride on the structure and corrosion properties of anodic coatings on Ti6Al4V alloy

ACAR M. T.

International Conference on Recent Academic Studies 1, 136-138, Turkey, 12 May 2023

II. Determination of the effect of NaH2PO4 film obtained on Ti45Nb by sol-gel method on corrosion resistance and surface wettability

ACAR M. T.

International Conference on Scientific and Academic Research, Turkey, 18 March 2023

III. Influence of NaF film produced by plasma electrolytic oxidation method on corrosion resistance of Cp-Ti

ACAR M. T.

International Conference on Engineering, Natural and Social Sciences, Turkey, 14 April 2023

IV. Investigation of the effect on wettability by applying heat treatment to the Ti6Al4V alloy ACAR M. T.

SOCRATES JOURNAL 6th International Conference on Engineering, Health and Applied Sciences December 13-16, 2022 Rome, 13 - 16 December 2022

V. Prediction Of Wear Rate Of Ti6Al4V Alloy Using Different Machine Learning Algorithms ACAR M. T.

SOCRATES JOURNAL 6th International Conference on Engineering, Health and Applied Sciences December 13-16, 2022 Rome, 13 - 16 December 2022

## **Supported Projects**

Acar M. T., Çomaklı O., TUBITAK Project, 2218 TÜBİTAK - Yurt İçi Doktora Sonrası Araştırma Burs Programı" 3D Eklemeli Üretim Yöntemiyle Elde Edilmiş Titanyum Malzemelere Uygulanan Yüzey İşlemleri Sonrasında Elektrokimyasal, Tribolojik Ve Biyouyumluluk Performanslarının Araştırılması, 2023 - 2025

### **Metrics**

Publication: 13 Citation (Scopus): 9 H-Index (Scopus): 2