

## **Assoc. Prof. SELMA ÖZARSLAN**

### **Personal Information**

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### **International Researcher IDs**

**ORCID:** 0000-0002-7225-1613  
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### **Education Information**

Doctorate, Hatay Mustafa Kemal University, FEN BİLİMLERİ ENSTİTÜSÜ, Turkey 2013 - 2018  
Postgraduate, Selcuk University, Turkey 2009 - 2012  
Undergraduate, Selcuk University, Turkey 2005 - 2009

### **Foreign Languages**

English

### **Dissertations**

Doctorate, Yüksek basınçlı döküm yöntemi ile üretilen biyobozunur mg alaşımlarının mekanik ve korozyon özelliklerine nadir element ilavesinin etkisi, Hatay Mustafa Kemal University, FEN BİLİMLERİ ENSTİTÜSÜ, 2018  
Postgraduate, Ağır atomlarda atomik yapı hesaplamaları, Selcuk University, 2012

### **Academic Titles / Tasks**

Research Assistant, 2011 - Continues

### **Courses**

Seminer, Undergraduate Double Major, 2023-2024  
Malzemelerin Yapı ve Özellikleri, Undergraduate Double Major, 2023-2024  
Fiziksel Metalurji, Undergraduate Double Major, 2023-2024  
Elektrokimyasal Karakterizasyon II, Undergraduate Double Major, 2022-2023  
Yarıiletken Elektronik Cihazlar, Undergraduate, 2022-2023  
Katıların Magnetik Özellikleri II, Undergraduate Double Major, 2022-2023  
İleri Katıhal Fiziği II, Undergraduate Double Major, 2022-2023  
Elektronik Laboratuvar II, Undergraduate, 2020-2021  
Fizik Laboratuvarı II, Undergraduate, 2020-2021, 2018-2019  
Fizik Laboratuvarı I, Undergraduate, 2020-2021, 2019-2020, 2018-2019  
Temel Fizik, Associate Degree, 2020-2021  
Fizik I, Undergraduate, 2018-2019

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

- I. Effect of Lanthanum on mechanical and wear properties of high-pressure die-cast Mg-3Al-3Sn-3Sb alloy  
Yarkadaş G., Kumruoğlu L. C., Özarslan S., Şevik H.  
Materialprüfung/Materials Testing, vol.63, no.1, pp.85-91, 2021 (SCI-Expanded)
- II. Microstructure, mechanical and corrosion properties of novel Mg-Sn-Ce alloys produced by high pressure die casting  
ÖZARSLAN S., Şevik H., SORAR İ.  
Materials Science and Engineering C, vol.105, 2019 (SCI-Expanded)
- III. Fabrication and mechanical characterization of rare earth permanent magnet SmCo<sub>5</sub>films  
Kuru M., ŞAHİN Ö., ÖZARSLAN S., Ozmetin A.  
Journal of Alloys and Compounds, vol.694, pp.726-732, 2017 (SCI-Expanded)
- IV. Influence of rare earth element on the mechanical properties of ZE41 magnesium alloys produced by mechanical alloying  
ŞAHİN Ö., Haluk Ertasak F., Oztekin K., ÖZARSLAN S.  
Acta Physica Polonica A, vol.130, no.1, pp.289-292, 2016 (SCI-Expanded)
- V. Influence of CaO on the nanohardness behaviour of AZ63 magnesium alloys produced by mechanical alloying method  
Boztas M., ÖZARSLAN S., ŞAHİN Ö.  
Acta Physica Polonica A, vol.130, no.1, pp.357-361, 2016 (SCI-Expanded)
- VI. Oscillator strengths for Be I  
Ateş Ş., Özarslan S., Çelik G., Taşer M.  
Atomic Data and Nuclear Data Tables, vol.98, no.4, pp.832-851, 2012 (SCI-Expanded)
- VII. Transition probabilities, oscillator strengths and lifetimes for singly ionized magnesium  
Çelik G., Ateş Ş., Özarslan S., Taşer M.  
Journal of Quantitative Spectroscopy and Radiative Transfer, vol.112, no.14, pp.2330-2334, 2011 (SCI-Expanded)

### Books & Book Chapters

- I. Biyobozunur Metalik Malzemeler  
ÖZARSLAN S.  
Paradigma Akademi Yayımları, Hatay, 2023

### Refereed Congress / Symposium Publications in Proceedings

- I. Investigation of Microstructural, Mechanical and Corrosion Properties of Biodegradable Mg-Sn-Y Alloys  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
The Turkish Physical Society 39 th International Physics Congress (TPS-39), Muğla, Turkey, 31 August - 04 September 2023
- II. Investigation of Microstructure and Corrosion Properties of Biodegradable Mg-Sn-Sr Alloy Produced by Gravity Casting Under Magnetic Field  
ÖZARSLAN S.  
2.Uluslararası Mühendislik ve Doğa Bilimleri Çalışmaları Kongresi ICENSS, Turkey, 7 - 09 May 2022
- III. Recent Research of Biodegradable Zn Based Alloys

- ÖZARSLAN S.  
The Turkish Physical Society 37th International Physics Congress (TPS-37), Muğla, Turkey, 01 September 2021
- IV. **Corrosion Properties of High Pressure Die Cast Mg-4Zn-xLa (x=0, 1, 2 And 4 wt.%) Alloys**  
ÖZARSLAN S.  
The Turkish Physical Society 36th International Physics Congress (TPS-36), Muğla, Turkey, 1 - 05 September 2020
- V. **Investigation of Biodegradable Ternary Magnesium Alloys**  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
The Turkish Physical Society 33th International Physics Congress (TPS-33), Muğla, Turkey, 6 - 10 September 2017
- VI. **Microstructure and Mechanical Properties of Mg-Zn-Ce Magnesium Alloys**  
ÖZARSLAN S., ŞEVİK H., SORAR İ.  
The Turkish Physical Society 33th International Physics Congress (TPS-33), Muğla, Turkey, 6 - 10 September 2017
- VII. **Modification of the Nano-mechanical Properties of the Lime-Fly Ash Paste with Nano TiO<sub>2</sub> Particles**  
ÖZBAY E., Durmuş İ. H., UZAL B., ŞAHİN O., ÖZARSLAN S.  
International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-USA)-2016, Texas, United States Of America, 18 May 2016
- VIII. **Indentation Size Effect of Biodegradable Mg Y Er Biomaterial**  
ŞAHİN O., ÖZARSLAN S., SORAR İ.  
International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-USA), United States Of America, 18 - 20 May 2016
- IX. **Production and mechanical characterization of Mg Y xYb biomaterials**  
ŞAHİN O., ÖZARSLAN S., SORAR İ.  
International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-USA)-2016, Texas, United States Of America, 18 - 20 May 2016, pp.64
- X. **Indentation Size Effect and Nanoindentation Study of WE43 Biodegradable Magnesium Alloy TESNAT 2016**  
ÖZARSLAN S., ŞAHİN O.  
International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology TESNAT 2016, Hatay, Turkey, 28 April 2016, pp.139
- XI. **Effect of Milling Time on Mechanical Properties of AE91 Biodegradable Magnesium Alloy**  
ÖZARSLAN S.  
International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology TESNAT 2016, Hatay, Turkey, 28 - 30 April 2016, pp.77
- XII. **Synthesis and Characterization of AE91 Biodegradable Magnesium Alloy**  
ÖZARSLAN S.  
International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology TESNAT 2016, Hatay, Turkey, 28 - 30 April 2016, pp.78
- XIII. **Nanoindentation Study of Ni<sub>80</sub>Fe<sub>20</sub> xCr<sub>1</sub> x Magnetic Thin Films**  
ŞAHİN O., ÇAKMAKTEPE Ş., ÖZARSLAN S., DİKEN S.  
International Conference on Natural Science and Engineering (ICNASE'16), Kilis, Turkey, 19 - 20 March 2016
- XIV. **Nanoindentation Study of Li doped CuO thin films produced by SILAR Technique**  
ÖZARSLAN S., ŞAHİN O., BAYANSAL F., ŞAHİN B., ÇETINKARA H. A.  
International Conference on Natural Science and Engineering (ICNASE'16), Kilis, Turkey, 19 - 20 March 2016
- XV. **Nanohardness and Elastic modulus Determination of Biodegradable WE43 Alloy Using Nanoindentation Technique**  
ŞAHİN O., ÖZARSLAN S.  
21st International Biomedical Science and Technology Symposium BIOMED 2015, Antalya, Turkey, 22 - 24 October 2015
- XVI. **Effect of Yttrium additives on Cytotoxicity and Mechanical Properties of Biodegradable Mg Y RE Alloys**  
ŞAHİN O., ÖZARSLAN S., GÖGEBAKAN B.  
21st International Biomedical Science and Technology Symposium BIOMED 2015, Antalya, Turkey, 22 - 24 October

2015

- XVII. **Nanoindentation study of CZTS thin film produced by chemical bath depositon method**  
ŞAHİN O., BAYANSAL F., CAN N., ÖZARSLAN S.  
SOLAR TR-3 3 rd Turkish Solar Electricity Conference and exhibition, Turkey, 27 - 29 April 2015
- XVIII. **Production of NiCrMo dental alloys using mechanical alloying and investigation nanohardness behaviour**  
ÖZARSLAN S., Fatma T., BAYANSAL F., ŞAHİN O.  
2 nd International Conference on Surfaces, Coating & Nanostructured Materials, 24 - 27 March 2015
- XIX. **Fabrication and Mechanical Characterization of SmCo films for Application in Superconductor-Ferromagnet Hybrid Structures**  
KURU M., ÖZARSLAN S., ŞAHİN O., ÖZMETİN A. E.  
International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT-ASIA)-2015, Turkey, 24 March 2015 - 27 March 1015
- XX. **Analysis of Step Load Unload Data Measured by Nanoindentation of Biodegradable WE43 Magnesium Alloy Produced By Mechanical Alloying**  
ŞAHİN O., ÖZARSLAN S.  
International Conference on Computational and Experimental Science and Engineering (ICCESEN 2014), Antalya, Turkey, 24 - 27 October 2014
- XXI. **Production of Biodegradable WE43 Magnesium Alloy**  
ŞAHİN O., ÖZARSLAN S.  
10th Nanoscience and Nanotechnology Congress (NanoTR-10), İstanbul, Turkey, 17 - 21 June 2014
- XXII. **Effect of addition of nickel to CoCrMo alloy on corrosion properties in artificial saliva solution**  
ÖZARSLAN S., MILOSEV I., ŞAHİN O.  
9th NANOSCIENCE & NANOTECHNOLOGY CONFERENCE (NANOTR-9), Erzurum, Turkey, 24 June 2013
- XXIII. **Vickers microhardness measurements of ASTM F75 CoCrMo alloys added Pd**  
ŞAHİN O., UZUNOĞLU S., ŞAHİN E., ÖZARSLAN S.  
9th NANOSCIENCE & NANOTECHNOLOGY CONFERENCE (NANOTR-9), Erzurum, Turkey, 24 June 2013
- XXIV. **Influence of Nickel addition on the Knoop microhardness behaviour of Biomedical CoCrMo alloys**  
ŞAHİN O., DEMİRYÜREK N., ÖZARSLAN S.  
9th NANOSCIENCE & NANOTECHNOLOGY CONFERENCE (NANOTR-9), Erzurum, Turkey, 24 July 2013
- XXV. **Biyomedikal NiCrMo Alaşımının Üretilmesi ve Mekanik Karakterizasyonu**  
ÖZARSLAN S., GÜDER H. S., ÇETİNKARA H. A., ŞAHİN O., TUNÇDEMİR A. R.  
XIII.Uluslararası Medikal Fizik Kongresi 2011, İzmir, Turkey, 17 - 19 October 2011
- XXVI. **Biyomedikal CoCrMo Alaşımının Nanoçentik Verilerinin Analizi**  
ŞAHİN O., GÜDER H. S., ÇETİNKARA H. A., ÖZARSLAN S., TUNÇDEMİR A. R.  
XIII.Uluslararası Medikal Fizik Kongresi 2011, İzmir, Turkey, 17 - 19 October 2011
- XXVII. **Indentation size effect and dynamic microhardness measuremet of beta-sialon ceramic**  
GÜDER H. S., UZUN O., ŞAHİN E., ÇETİNKARA H. A., GÖÇMEZ H., SOPICKA LIZER M., ŞAHİN O., ÖZARSLAN S.  
The Turkish Physical Society 28th International Physics Congress (TPS-28), Muğla, Turkey, 06 September 2011
- XXVIII. **The Theoretical Calculations of Oscillator Strength and Transition Probability for Ho II**  
ÖZARSLAN S., ÇELİK G., ATEŞ Ş., TAŞER M.  
The Turkish Physical Society 28th International Physics Congress (TPS-28), Muğla, Turkey, 6 - 09 September 2011
- XXIX. **Load-Independent Hardness Determination of Biomedical CoCrMo Alloy**  
ŞAHİN O., TUNÇDEMİR A. R., ÇETİNKARA H. A., GÜDER H. S., ŞAHİN E., ÖZARSLAN S.  
The Turkish Physical Society 28th International Physics Congress (TPS-28), Muğla, Turkey, 6 - 09 September 2011
- XXX. **Conventional microhardness study of βeta-sialon ceramic**  
GÜDER H. S., ŞAHİN E., ŞAHİN O., GÖÇMEZ H., ÇETİNKARA H. A., ÖZARSLAN S.  
The Turkish Physical Society 28th International Physics Congress (TPS-28), Muğla, Turkey, 06 September 2011
- XXXI. **O IV için geçiş olasılıklarının ve şiddetlerinin belirlenmesi**  
Tekeli G., ŞENDOĞAN M., ÇELİK G., ATEŞ Ş., TAŞER M., ÖZARSLAN S.  
The Turkish Physical Society 27th International Physics Congress (TPS-27), İstanbul, Turkey, 14 September 2010

- XXXII. **Rubidyum atomunda elektrik dipol geçişler için geçiş olasılıklarının hesaplanması**  
ÇELİK G., GÜLLÜLER A., ÖZARSLAN S., ATEŞ Ş., TAŞER M.  
The Turkish Physical Society 27th International Physics Congress (TPS-27), İstanbul, Turkey, 14 September 2010
- XXXIII. **Mg II İçin Osilatör Siddetlerinin Hesaplanması**  
ÖZARSLAN S., ÇELİK G., ATEŞ Ş., TAŞER M.  
The Turkish Physical Society 27th International Physics Congress (TPS-27), İstanbul, Turkey, 14 - 19 September 2010
- XXXIV. **Bir Kez İyonlaşmış Berilyum (Be II) İçin Geçiş Olasılıklarının ve Hayat Sürelerinin Hesaplanması**  
ÖZARSLAN S., ÇELİK G., ATEŞ Ş., TAŞER M., YILDIZ M.  
The Turkish Physical Society 27th International Physics Congress (TPS-27), İstanbul, Turkey, 14 - 17 September 2010
- XXXV. **Kalsiyum ( CaI ) atomunda geçiş olasılıklarının ve uyarılmış seviyelerin hayat sürelerinin en zayıf bağlı elektron potansiyel model teori kullanılarak hesaplanması**  
YILDIZ M., Tekeli G., ÇELİK G., ATEŞ Ş., ÖZARSLAN S., TAŞER M.  
The Turkish Physical Society 27th International Physics Congress (TPS-27), İstanbul, Turkey, 14 September 2010

## Supported Projects

ÖZARSLAN S., Project Supported by Higher Education Institutions, Biyobozunur Zn-Li Alaşımının Mikroyapı, Mekanik ve Korozyon Özelliklerinin İncelenmesi, 2019 - 2022

ÖZARSLAN S., SORAR İ., Project Supported by Higher Education Institutions, Yüksek Basınçlı Döküm Yöntemi ile Üretilen Mg Alaşımının Mekanik ve Korozyon Özelliklerine Nadir Element İlavesinin Etkisi, 2016 - 2018

ÖZARSLAN S., BAYANSAL F., ŞAHİN O., Project Supported by Higher Education Institutions, Biyomedikal Malzemelerde kullanılan NiCrMo alaşımının farklı dönüş hızlarında üretilmesi ve mekanik özelliklerinin belirlenmesi, 2014 - 2015

ÖZARSLAN S., ŞAHİN O., Project Supported by Higher Education Institutions, Biyomalzeme Üretimi İçin İnert Ortam Oluşturulması, 2014 - 2015

ÖZARSLAN S., KARAHAN İ. H., GÜDER H. S., ŞAHİN O., Project Supported by Higher Education Institutions, Biyobozunur WE43 Alaşımının Üretilmesi ve Mekanik Karakterizasyonu, 2012 - 2012

## Metrics

Publication: 53

Citation (Scopus): 89

H-Index (Scopus): 4

## Non Academic Experience

MUSTAFA KEMAL ÜNİVERSİTESİ

Ljubljana University