

## Res. Asst. PhD İŞİN AKAY ERDOĞAN

### Personal Information

**Office Phone:** [+90 222 239 3750](tel:+902222393750) Extension: 3695

**Email:** [iakay@ogu.edu.tr](mailto:iakay@ogu.edu.tr)

**Web:** <https://avesis.ogu.edu.tr/iakay>

### International Researcher IDs

ORCID: 0000-0002-3390-0676

Publons / Web Of Science ResearcherID: AAG-8577-2020

ScopusID: 26029695100

Yoksis Researcher ID: 171270

### Education Information

Doctorate, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 2010 - 2021

Undergraduate, Anadolu University, Faculty Of Business Administration, Department Of Business, Turkey 2004 - 2013

Postgraduate, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 2007 - 2010

Undergraduate, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 2003 - 2007

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Nanokristalin alüminyum ve gümüşün çözünür eklenmesiyle stabilizasyonu, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Metallurgical and Materials Engineering, 2020

Postgraduate, Mekanik alaşımlandırma ile üretilmiş Mg<sub>2</sub>Ni, Mg<sub>1,5</sub>Al<sub>0,5</sub>Ni, Mg<sub>1,5</sub>Zr<sub>0,5</sub>Ni ve Mg<sub>1,5</sub>Ti<sub>0,5</sub>Ni alaşımlarının elektrokimyasal hidrojen depolama karakteristikleri ve akımsız nikel kaplamanın etkisi, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Metallurgical Engineering, 2010

### Research Areas

Nanomaterials

### Academic Titles / Tasks

Research Assistant PhD, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, METALURJİ VE MALZEME MÜHENDİSLİĞİ BÖLÜMÜ, 2021 - Continues

Research Assistant, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, METALURJİ VE MALZEME

## Courses

Engineering Materials , Undergraduate, 2023 - 2024, 2022 - 2023

SURFACE TREATMENTS OF METALS, Undergraduate, 2023 - 2024

MATERIALS SCIENCE, Undergraduate, 2023 - 2024

Alloying Syntesis and Performance Applications, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

INTRODUCTION TO METALLURGICAL AND MATERIALS ENINERIG B, Undergraduate, 2023 - 2024, 2022 - 2023

Alloying Design B, Undergraduate, 2022 - 2023, 2021 - 2022

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

- I. **Effects of Zr addition on electrochemical characteristics of MgTiMnNi hydrogen storage alloys**  
Küçükdeveci N., AKAY ERDOĞAN I., BİNAL AYBAR A.  
International Journal of Hydrogen Energy, vol.48, no.49, pp.18753-18760, 2023 (SCI-Expanded)
- II. **Electrochemical hydrogen storage properties of mechanically alloyed Mg<sub>0.8</sub>Ti<sub>0.2</sub>-xMnxNi (x 1/4 0, 0.025, 0.05, 0.1) type alloys**  
Küçükdeveci N., AKAY ERDOĞAN I., BİNAL AYBAR A., ANIK M.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.4, pp.2511-2519, 2022 (SCI-Expanded)
- III. **Electrochemical hydrogen storage performance of Mg-Ti-Zr-Ni alloys**  
ANIK M., AKAY ERDOĞAN I., Oezdemir G., BAKSAN B.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.24, pp.9765-9772, 2009 (SCI-Expanded)
- IV. **Effect of electroless nickel coating on the electrochemical hydrogen storage characteristics of Al and Zr including Mg-based alloys**  
ANIK M., AKAY ERDOĞAN I., Topcu S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.13, pp.5449-5457, 2009 (SCI-Expanded)
- V. **Electrochemical hydrogen storage characteristics of Mg<sub>1.5</sub>Al<sub>0.5</sub>-xZrxNi (x=0, 0.1, 0.2, 0.3, 0.4, 0.5) alloys synthesized by mechanical alloying**  
ANIK M., GAŞAN H., Topcu S., AKAY ERDOĞAN I., Aydinbeyli N.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.6, pp.2692-2700, 2009 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **MgTiMnZrNi Alaşımlarının Elektrokimyasal Hidrojen Depolama Performansları(Electrochemical Hydrogen Storage Performances of MgTiMnZrNi quaniry Alloys)**  
KÜÇÜKDEVECİ N., AKAY ERDOĞAN I., BİNAL AYBAR A., BAYER ÖZTÜRK Z., ANIK M.  
4. Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'21 ), Nevşehir, Turkey, 28 May 2021
- II. **MgNi esashı Alaşımlara İlave edilen Katkı Elementlerinin Hidrojen Depolama Performansına Etkisi**  
KÜÇÜKDEVECİ N., AKAY ERDOĞAN I., BİNAL AYBAR A.  
4. Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'21 ), Turkey, 28 May 2021
- III. **Effect of Manganese Additive Element on Mg<sub>0.8</sub>Ti<sub>0.2</sub>Ni Ternary Hydrogen Storage Alloys**  
KÜÇÜKDEVECİ N., BİNAL AYBAR A., AKAY ERDOĞAN I., ANIK M.  
4. The International Conference on Material Science and Technology in Kızılcahamam/Ankara, 18 - 20 October 2019

#### IV. Electrochemical Hydrogen Storage Characteristics of $\text{Mg}_{1.5}\text{Ti}_{0.5-x}\text{Zr}_x\text{Ni}$ alloys

Anik M., AKAY ERDOĞAN I., Oezdemir G.

216th Electrochemical Society Meeting, 4 - 09 October 2009

#### Metrics

Publication: 9

Citation (WoS): 96

Citation (Scopus): 96

H-Index (WoS): 3

H-Index (Scopus): 3