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International Researcher IDs
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Education Information

Doctorate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (Dr), Turkey 2007 - 2017
Postgraduate, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 2003 - 2006
Undergraduate Double Major, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Makine Mühendisliği Bölümü, Turkey 1998 - 2003
Undergraduate, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 1998 - 2002

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, (La1-yMy)2(Ni1-xCox)7 (M: Ti ve Mg, x: 0-0,2, y: 0-0,5) Hidrojen Depolama Alaşımlarının Elektro-deoksidasyon Yöntemiyle Üretimi ve Karakterizasyonu, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (Dr), 2017
Postgraduate, Aa 2024-T3 alüminyum alaşımının sürtünme karıştırma kaynağında işlem parametrelerinin mikroyapı ve mekanik özelliklere etkileri, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, 2006

Research Areas

Engineering and Technology

Academic Titles / Tasks

Research Assistant PhD, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Metalurji ve Malzeme Müh.Böl., 2017 - Continues
Research Assistant, Eskisehir Osmangazi University, Mühendislik-Mimarlık Fakültesi, Metalurji ve Malzeme Müh.Böl.,

2004 - 2017

Courses

Materials Production Research , Undergraduate, 2023 - 2024
Fizikokimya B, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018
Metalurji Termodinamiği I A, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018
Fizikokimya A, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2018 - 2019, 2017 - 2018
metallurgical thermodynamics B, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Applications of Metallurgy, Undergraduate, 2023 - 2024, 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 Mg0.8Ti0.2-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. **Direct synthesis of La-Mg-Ni-Co type hydrogen storage alloys from oxide mixtures**
BİNAL AYBAR A., ANIK M.
JOURNAL OF ENERGY CHEMISTRY, vol.26, no.4, pp.719-723, 2017 (SCI-Expanded)

IV. **Molten salt synthesis of La(Ni1-xCox)(5) (x=0, 0.1, 0.2, 0.3) type hydrogen storage alloys**
ANIK M., Hatirnaz N. B., BİNAL AYBAR A.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.1, pp.361-368, 2016 (SCI-Expanded)

V. **Synthesis of La2Ni7 hydrogen storage alloy by the electro-deoxidation technique**
ANIK M., BİNAL AYBAR A., Kucukdeveci N., Erken H., BAKSAN B., GAŞAN H., Hatirnaz N. B., LÖKÇÜ E.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.5, pp.2248-2254, 2015 (SCI-Expanded)

VI. **Synthesis of La-2(Ni1-xCox)(7) (x=0.05, 0.1, 0.2) Hydrogen Storage Alloys by the Electro-Deoxidation Technique**
ANIK M., BİNAL AYBAR A., Hatirnaz N. B., Ozdemir D.
JOURNAL OF THE ELECTROCHEMICAL SOCIETY, vol.162, no.6, 2015 (SCI-Expanded)

VII. **Hydrogen storage characteristics of Ti2Ni alloy synthesized by the electro-deoxidation technique**
ANIK M., BAKSAN B., Orbay T. O., Kucukdeveci N., BİNAL AYBAR A., ÖZDEN R. C., GAŞAN H., KOÇ N.
INTERMETALLICS, vol.46, pp.51-55, 2014 (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 esaslı 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 Mg08Ti02Ni 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. **Direct Synthesis of La-Ni Based Hydrogen Storage Alloys from the Oxide Form**
BİNAL AYBAR A., ANIK M.
19. Uluslararası Metalurji ve Malzeme Kongresi, 25 - 27 October 2018

V. **Effect of Magnesium Additive Element on the Hydrogen Storage Characteristics of La-Ni Based Alloys**
BİNAL AYBAR A., ANIK M.
International Conference on Advances and Innovations in Engineering (ICAIE), Elazığ, Turkey, 10 - 12 May 2017

VI. **Synthesis of La-Mg-Ni-Co Hydrogen Storage Alloys by Electro-deoxidation**
BİNAL AYBAR A., ANIK M.
The Second International Hydrogen Technologies Congress - 2017 (IHTEC 2017), Adana, Turkey, 15 - 18 March 2017

VII. **SYNTHESIS and CHARACTERİZATİON of A2B7 TYPE HYDROGEN STORAGE ALLOYS**
BİNAL AYBAR A., ANIK M.
International Material Science and Technology in Cappadocia (IMSTEC'16), April 6-8, 2016, Nevsehir, Turkey, Nevşehir, Turkey, 6 - 08 April 2016, pp.819-822

VIII. **Synthesis of La Mg Ni Co hydrogen storage alloys by the electro deoxidation technique**
BİNAL AYBAR A., ANIK M.
IEE8E, 11 - 13 May 2016

IX. **Synthesis of L NixCo1 x 5 Type Hydrogen Storage Alloys by Electro deoxidation**
ANIK M., HATIRNAZ N. B., BİNAL AYBAR A.
World congress and Expo on MaterialsScience & Polymer Engineering, Dubai, United Arab Emirates, 26 - 28 November 2015

X. **Synthesis of La NixCo1 x 5 type hydrogen storage alloys by electro deoxidation**
ANIK M., Başak H., BİNAL AYBAR A.
World congress and expo on materials science & polymer engineering, Dubai, United Arab Emirates, 26 - 28 November 2015

XI. **Synthesis of A2B7 Type Hydrogen Storage Alloys in the Molten Salt**
BİNAL AYBAR A., Duygu A., ANIK M.
mESC-IS 2015 International Symposium on Materials for Energy Storage & Conversion, Ankara, Turkey, 7 - 09 September 2015

XII. **Molten Salt Synthesis of La Ni Co Hydrogen Storage Alloys**
ANIK M., BİNAL AYBAR A., Başak H., Özdemir D.
METAL 2015, Brno, Czech Republic, 3 - 05 June 2015, pp.140

Scientific Refereeing

Uluslararası Batı Karadeniz Mühendislik ve Fen Bilimleri Dergisi, Other journals, August 2023
Nevşehir Bilim Ve Teknoloji Dergisi, National Scientific Refreed Journal, November 2022
Nevşehir Bilim ve Teknoloji Dergisi, National Scientific Refreed Journal, November 2022

Metrics

Publication: 19
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