

## Asst. Prof. İREM BURCU ALGAN ŞİMŞEK

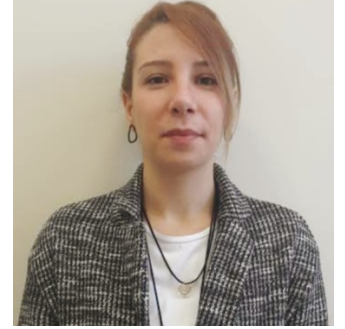
### Personal Information

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### International Researcher IDs

ScholarID: aK1lmFsAAAAJ

ORCID: 0000-0001-5206-3722

Publons / Web Of Science ResearcherID: N-3965-2013

ScopusID: 57200546194

Yoksis Researcher ID: 54524

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (Dr), Turkey 2015 - 2021

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (YI) (Tezli), Turkey 2013 - 2015

Undergraduate, Karadeniz Technical University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey 2008 - 2012

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Vocational Course, International Summer School on Materials for Energy Storage & Conversion, Muğla Sıtkı Koçman University, 2023

Vocational Training, Erasmus Plus Personel Eğitim Alma Hareketliliği, Vilnius University Faculty of Physics, 2019

Vocational Training, ERASMUS, Yüksek Lisans Araştırma, University of Applied Sciences Zwickau, 2015

### Dissertations

Doctorate, PRODUCTION, CHARACTERIZATION AND WELDABILITY OF BORON DOPED HIGH ENTROPY ALLOYS BY ARC MELTING, Gazi University, Fen Bilimleri Enstitüsü, 2021

Postgraduate, Organik fren balatalarında kullanılan metal tozlarının sürtünme ve aşınma performansının incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği (YI) (Tezli), 2015

## Research Areas

Metallurgical and Materials Engineering, Material science and engineering

## Academic Titles / Tasks

Assistant Professor, Gazi University, Teknoloji Fakültesi, Metalurji Ve Malzeme Mühendisliği, 2023 - Continues  
Researcher, Drexel University, College of Engineering, Materials Science and Engineering, 2023 - 2024  
Research Assistant, Gazi University, Teknoloji Fakültesi, Metalurji Ve Malzeme Mühendisliği, 2013 - 2023

## Academic and Administrative Experience

Assistant Coordinator of The Rectorate, Gazi University, Rektörlük, Gazi Üniversitesi, 2024 - Continues

## Courses

Malzeme Laboratuvarı, Undergraduate, 2024 - 2025  
Proje Yönetimi ve Girişimcilik, Undergraduate, 2024 - 2025  
Mezuniyet Projesi, Undergraduate, 2024 - 2025  
Kimyasal Metalurji, Undergraduate, 2022 - 2023  
Failure Analysis , Undergraduate, 2022 - 2023  
Failure Analysis , Undergraduate, 2021 - 2022

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

- I. **The effects of alkali, alkali-acid and sandblasting surface treatments applied before Tantalum-Oxide coating with magnetron sputtering on the wear behavior of 7075 Aluminum alloys**  
GÜL C., ALBAYRAK S., ÇİNİCİ H., ALGAN İ. B.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.38, no.2, pp.795-806, 2023 (SCI-Expanded)
- II. **The evolution of phases in FeNiCoCrCuB<sub>x</sub> high entropy alloys produced through microwave sintering and vacuum arc melting**  
ALGAN ŞİMŞEK İ. B., Talaş S., KURT A.  
Revista de Metalurgia, vol.58, no.1, 2022 (SCI-Expanded)
- III. **The Effect of B Addition on the Microstructural and Mechanical Properties of FeNiCoCrCu High Entropy Alloys**  
Algan Simsek İ. B., Arik M. N., Talaş Ş., Kurt A.  
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, vol.52, no.5, pp.1749-1758, 2021 (SCI-Expanded)
- IV. **The effect of metal fibres and borax powders on the wear and friction performances of the organic based brake pads**  
Algan İ. B., Kurt A.  
Metallofizika i Noveishie Tekhnologii, vol.39, no.11, pp.1511-1523, 2017 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Boron on Microstructure and Hardness Properties of High Entropy Alloys**

Algan İ. B., Arık M. N., Talaş Ş., Kurt A., Akkurt F.

International Symposium on Boron (BORON2019), Nevşehir, Turkey, 17 - 19 April 2019, pp.164-169

- II. **Farkli Toz Metal Malzemelerin Mikrodalga Ve İndüksiyon Isıtma İle Birleştirilebilirliği**  
ALGAN İ. B., AKSU Y., ÇİFÇİ Y., ÜNLÜ N., ÇITAK R., ÖZÇATALBAŞ Y., KURT A.  
5th International Conference on Welding Technologies and Exhibition (ICWET'18), Saraybosna, Bosnia And Herzegovina, 26 - 28 September 2018, pp.471-476
- III. **Joinability Of Brass Alloy By Furnace And Microwave Brazing**  
Aksu Y., Algan İ. B., Çıtak R., Kurt A.  
5th International Conference on Welding Technologies and Exhibition (ICWET'18) 26-28 September 2018, Sarajevo-Bosnia and Herzegovina, Sarajevo, Bosnia And Herzegovina, 26 - 28 September 2018, pp.354-359
- IV. **Investigation of Sinterbonding of Cu and Fe Couple Produced by Powder Metallurgy Method**  
Avcı H., Algan İ. B., Kurt A.  
4th International conference on materials science and nanotechnology for next generation (MSNG2017), Sarajevo, Bosnia And Herzegovina, 28 - 30 June 2017, pp.277-286
- V. **Soğuk Basınç Kaynak Yöntemiyle Alüminyum Tellerin Kaynaklanabilirliği**  
Algan İ. B., Ayata A., Atmaca E. S., Kurt A.  
4. Uluslararası Kaynak Teknolojileri Konferansı ve Sergisi, Gaziantep, Turkey, 11 - 13 May 2016, vol.2, pp.1660-1666
- VI. **Investigation Of Weldability On The Galvanized Sheet Steels By Laser Welding Method**  
Algan İ. B., Atmaca E. S., Kurt A.  
4. International Conference On Welding Technologies and Exhibition, Gaziantep, Turkey, 11 - 13 May 2016, vol.1, pp.380-388
- VII. **Effects of Borax On The Wear Behavior of Organic Brake Lining Materials**  
Algan İ. B., Kurt A.  
17. International Metallurgy and Materials Congress İstanbul TÜYAP, İstanbul, Turkey, 11 - 13 September 2014, vol.1, pp.738-744
- VIII. **SAPLAMA KAYNAK YÖNTEMİ İLE INCONEL 718 SÜPERALAŞIM MALZEMENİN KAYNAKLANABİLİRLİĞİ**  
Kurt A., Algan İ. B., Atmaca E. S.  
3rd International Conference on Welding Technologies and Exhibition, Manisa, Turkey, 22 - 24 May 2014, pp.588-594
- IX. **WELDABILITY OF POWDER METAL IRON METERIALS BY STUDY WELDING**  
Kurt A., Algan İ. B., Atmaca E. S.  
3 rd INTERNATIONAL CONFERENCE ON WELDING TECHNOLOGIES and EXHIBITON, Manisa, Turkey, 21 - 23 May 2014, pp.41-48
- X. **Inconel 718 Süperalaşım Malzemenin TIG Kaynağı İle Kaynaklanabilirliği**  
Atmaca E. S., Algan İ. B., Kurt A., Köseoğlu T.  
3. Uluslararası Kaynak Teknolojileri Konferansı ve Sergisi, Manisa, Turkey, 21 - 23 May 2014, vol.1, pp.893-900

## Supported Projects

Algan Şimşek İ. B., Postdoctoral Research Program Project, 2219-Yurt Dışı Doktora Sonrası Araştırma Burs Programı, 2023 - 2024

Algan Şimşek İ. B., Kurt A., Project Supported by Higher Education Institutions, Bor Katkılı Yüksek Entropi Alaşımının Ark Ergitme İle Üretimi ve Karakterizasyonu, 2018 - 2021

Algan İ. B., Kurt A., Aydınonat Y. S., KOSGEB, Sinter Bronz Balata Malzemelerinin Geliştirilmesi, 2019 - 2020

Algan İ. B., Kurt A., Talaş Ş., Arık M. N., BOREN, Ulusal Bor Araştırma Enstitüsü Projesi, Fe, Ni, Co, Cr, Cu Esashlı Bor Katkılı Yüksek Entropi Alaşımının Ark Ergitme ile Üretimi ve Karakterizasyonu, 2018 - 2020

Algan İ. B., Çavdar E., Kılıçlı V., TUBITAK Project, Doğa Eğitime Bilim Okulları-Geleceğini Bilimle Şekillendir, 2019 - 2019

Ateş H., Kılıçlı V., Algan Şimşek İ. B., Project Supported by Higher Education Institutions, Nano Materials Laboratory and Characterize Analysis Labotory, 2015 - 2017

Algan İ. B., Ateş H., Çavdar Ş., Koralay H., Kılıçlı V., Project Supported by Higher Education Institutions, Nanomalzeme Sentez ve Karakterize-Analiz Laboratuvar Kurulumu Altyapı Projesi- Gazi Üniversitesi BAP, 2015 - 2016  
Algan İ. B., Kılıçlı V., Güral A., Çinici H., Aksu Y., Project Supported by Higher Education Institutions, Metalografi Laboratuvarı Modernizasyonu ve Yenilenmesi 2013-Gazi Üniversitesi BAP, 2013 - 2015

## **Metrics**

Publication: 14  
Citation (WoS): 8  
Citation (Scopus): 11  
H-Index (WoS): 1  
H-Index (Scopus): 2

## **Scholarships**

2219-International Postdoctoral Research Fellowship Program for Turkish Citizens, TUBITAK, 2023 - 2024

## **Non Academic Experience**

University, Gazi Üniversitesi, Teknoloji Fakültesi