

## Assoc. Prof. MELİKA ÖZER

### Personal Information

**Email:** mcerah@gazi.edu.tr

**Other Email:** mcerah@gmail.com

**Web:** <https://avesis.gazi.edu.tr/mcerah>

### International Researcher IDs

ScholarID: q9QYzmMAAAAJ

ORCID: 0000-0003-1807-3585

Publons / Web Of Science ResearcherID: AIF-4395-2022

ScopusID: 50123456789

Yoksis Researcher ID: 55986

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Metal Eğitimi (Dr), Turkey 2004 - 2010

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Metal Eğitimi (YI) (Tezli), Turkey 2000 - 2003

Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Metal Eğitimi Bölümü, Turkey 1996 - 2000

### Foreign Languages

English, B1 Intermediate

### Dissertations

Doctorate, Yarı-katı döküm tekniği ile üretilen Al-Si alaşımlarında yapı-özellik ilişkisinin incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, Metal Eğitimi (Dr), 2010

Postgraduate, Küresel grafitli dökme demirde martensit hacim oranı ve partikül boyutunun mekanik özellikler üzerine etkisi, Gazi University, Fen Bilimleri Enstitüsü, Metal Eğitimi (YI) (Tezli), 2003

### Research Areas

Material science and engineering, Testing and Control of Materials, Thermal Treatment, Material Characterization, Metallic Materials, Non-Ferrous Alloy Production, Principles of Foundry Technology, Non Metallic Materials Production

### Academic Titles / Tasks

Assistant Professor, Gazi University, Teknoloji Fakültesi, Metalurji ve Malzeme Mühendisliği, 2011 - Continues

Research Assistant, Gazi University, Teknik Eğitim Fakültesi, Metal Eğitimi, 2001 - 2011

### Courses

DÖKÜM LABORATUVARI, Undergraduate, 2021 - 2022  
Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2015 - 2016  
ISIL İŞLEMLER VE LABORATUVARI, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
YÜKSEK LİSANS TEZ ÇALIŞMASI, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021  
Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019  
Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021  
Undergraduate, 2021 - 2022  
Undergraduate, 2021 - 2022, 2013 - 2014  
İLERİ METALOGRAFİ VE HASAR ANALİZİ, Postgraduate, 2021 - 2022, 2020 - 2021  
Undergraduate, 2020 - 2021, 2019 - 2020, 2017 - 2018  
Postgraduate, 2019 - 2020  
Postgraduate, 2019 - 2020  
Postgraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017  
Postgraduate, 2018 - 2019, 2017 - 2018  
5940037 YÜKSEK LİSANS UZMANLIK ALAN, Postgraduate, 2017 - 2018  
Undergraduate, 2017 - 2018, 2015 - 2016, 2014 - 2015  
Undergraduate, 2017 - 2018  
İŞYERİ EĞİTİMİ, Undergraduate, 2018 - 2019  
Undergraduate, 2017 - 2018, 2015 - 2016  
5940037 YÜKSEK LİSANS UZMANLIK ALAN, Postgraduate, 2017 - 2018  
Undergraduate, 2015 - 2016, 2014 - 2015  
TEKNİK İNGİLİZCE-II, Undergraduate, 2015 - 2016  
Undergraduate, 2014 - 2015, 2013 - 2014  
ÖZEL ÖĞRETİM YÖNTEMLERİ II, Undergraduate, 2014 - 2015, 2013 - 2014  
Undergraduate, 2013 - 2014  
Undergraduate, 2014 - 2015  
MESLEKİ YABANCI DİL I, Undergraduate, 2014 - 2015  
Undergraduate, 2013 - 2014  
METALOGRAFİ VE LAB., Undergraduate, 2014 - 2015  
Undergraduate, 2012 - 2013  
MEZUNİYET TEZİ, Undergraduate, 2012 - 2013

## Advising Theses

Özer M., Özer A., THE EFFECT OF SURFACE ROLLING PROCESS ON MECHANICAL PROPERTIES OF AlZn5.5MgCu AL ALLOY, Postgraduate, K.DALLI(Student), 2022  
ÖZER M., Feedstock Production By Electro-Magnetic Stirring Method For Thixo-Forming, Postgraduate, S.ATAKUL(Student), 2021  
Özer M., The Effect Of Sintering Methods On The Properties Of B4C Reinforced Pre-Alloyed Al Composites Produced By Powder Metallurgy Method, Postgraduate, S.İrem(Student), 2021

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

- I. **Correlation of microstructure, mechanical properties and electrical conductivity of Fe-Cu alloys produced by high-energy 3D ball milling and spark plasma sintering**  
Tasci U., Yilmaz T. A., Ozer M., Ozer A.  
CANADIAN METALLURGICAL QUARTERLY, no. Published online, pp.1-12, 2024 (SCI-Expanded)
- II. **Research on the microstructure and electrical conductivity in hypereutectic Al-Si compacts and B4C added composites fabricated by conventional, microwave, and spark plasma sintering**

- Özer M.  
KOVOLVE MATERIALY, vol.62, no.5, pp.303-312, 2024 (SCI-Expanded)
- III. **The effect of quenching/double quenching and tempering heat treatment cycles on the microstructure, impact energy and hardness of AISI H13 tool steel**  
Özer A., Ozer M., Atak Ç., Altuntas G.  
CANADIAN METALLURGICAL QUARTERLY, vol.63, no.4, pp.1138-1149, 2024 (SCI-Expanded)
- IV. **Effect of ball-burnishing on surface integrity and fatigue behaviour of 7175-T6 AA**  
Özer M., Dalli K., Özer A.  
MATERIALS SCIENCE AND TECHNOLOGY, vol.39, no.2, pp.248-257, 2023 (SCI-Expanded)
- V. **Investigation of the microstructure, hardness and electrical conductivity properties of Fe/Graphene compacts**  
Altuntas O., ÖZER M., ALTUNTAŞ G., ÖZER A.  
Materials Science and Technology (United Kingdom), vol.39, no.17, pp.2670-2679, 2023 (SCI-Expanded)
- VI. **Influence of heat treatments on microstructure and wear behavior of AISI H13 tool steel**  
Özer M.  
KOVOLVE MATERIALY, vol.60, no.6, pp.387-396, 2022 (SCI-Expanded)
- VII. **Influence of spark plasma sintering and conventional sintering on microstructure and mechanical properties of hypereutectic Al-Si alloy and hypereutectic Al-Si/B4C composites**  
Özer M., Aydoğan S. İ., Özer A., Çinici H., Ayas E.  
KOVOLVE MATERIALY, vol.60, no.3, pp.171-179, 2022 (SCI-Expanded)
- VIII. **Effects of sintering techniques and parameters on microstructure and mechanical properties of Al-15Si-2,5Cu-0.5Mg compacts and Al-15Si-2,5Cu-0.5Mg/B4C composites**  
Özer M., Aydoğan S. İ., Çinici H., Özer A.  
MATERIALS TODAY COMMUNICATIONS, vol.30, no.5, pp.1-14, 2022 (SCI-Expanded)
- IX. **The effect of friction stir welding parameters on microstructure and fatigue strength of CuZn37 brass alloys**  
Ozer A., Sik A., Cevik B., Ozer M.  
KOVOLVE MATERIALY-METALLIC MATERIALS, vol.55, no.2, pp.107-114, 2017 (SCI-Expanded)
- X. **Effects of the thixocasting injection velocity on tensile properties of an A357 Al alloy**  
Özer M., Akar N., Kocatepe K., Erdoğan M.  
MATERIALS TESTING, vol.57, no.9, pp.790-794, 2015 (SCI-Expanded)
- XI. **Effects of Pouring Distance and Holding Time on the Thixotropic Microstructure of A357 Alloy**  
ÖZER M., KOCATEPE K., ERDOĞAN M.  
MATERIALS TESTING, vol.56, no.2, pp.111-117, 2014 (SCI-Expanded)
- XII. **Comparison of abrasive wear behavior of ductile iron with different dual matrix structures**  
Sahin Y., KILIÇLI V., ÖZER M., ERDOĞAN M.  
WEAR, vol.268, pp.153-165, 2010 (SCI-Expanded)
- XIII. **Effect of martensite volume fraction and tempering time on abrasive wear of ferritic ductile iron with dual matrix**  
Sahin Y., Erdogan M., Cerah M.  
WEAR, no.1-2, pp.196-202, 2008 (SCI-Expanded)
- XIV. **Investigation of the variations in microstructure and mechanical properties of dual-matrix ductile iron by Magnetic Barkhausen Noise analysis**  
GÜR C. H., ÖZER M., ERDOĞAN M.  
RESEARCH IN NONDESTRUCTIVE EVALUATION, vol.19, no.1, pp.44-60, 2008 (SCI-Expanded)
- XV. **The tensile fracture behaviour of intercritically annealed and quenched plus tempered ferritic ductile iron with dual matrix structure**  
Kocatepe K., Cerah M., Erdogan M.  
MATERIALS & DESIGN, no.1, pp.172-181, 2007 (SCI-Expanded)
- XVI. **Effect of martensite volume fraction and its morphology on the tensile properties of ferritic ductile iron with dual matrix structures**

Kocatepe K., Cerah M., Erdogan M.

JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, no.1-3, pp.44-51, 2006 (SCI-Expanded)

- XVII. **Influence of intercritical austenitising, tempering time and martensite volume fraction on the tensile properties of ferritic ductile iron with dual matrix structure**

Erdogan M., Cerah M., Kocatepe K.

INTERNATIONAL JOURNAL OF CAST METALS RESEARCH, no.4, pp.248-253, 2006 (SCI-Expanded)

- XVIII. **Influence of martensite volume fraction and tempering time on tensile properties of partially austenitized in the ( $\alpha$  plus  $\gamma$ ) temperature range and quenched plus tempered ferritic ductile iron**

Cerah M., Kocatepe K., Erdogan M.

JOURNAL OF MATERIALS SCIENCE, no.13, pp.3453-3459, 2005 (SCI-Expanded)

## Articles Published in Other Journals

- I. **AISI H13 Takım Çeliğine Uygulanan Derin Kriyojenik İşlem ve Temperleme Isıl İşleminin Mikroyapı, Sertlik ve Darbe Enerjisine Etkisi**

ÖZER M.

Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.7, no.3, pp.688-699, 2019 (Peer-Reviewed Journal)

- II. **The Fatigue Strength of AISI 430 304 Stainless Steels Welded by CO2 Laser Beam Welding**  
ÇALIGÜLÜ U., TÜRKMEN M., ÖZER A., TAŞKIN M., ÖZER M.

Metallofizika I Noveishie Tekhnologii, vol.37, no.6, pp.839-852, 2015 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. **The Effect On Microstructure And Hardness Of Double Quenching Heat Treatment Applied To AISI H13 Hot Work Tool Steel**

ÖZER M., ATAK Ç.

4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), Ankara, Turkey, 14 December 2022, pp.117

- II. **AA7075/B4C/NANO GRAFEN YÜZEY KATMANLI KOMPOZIT MALZEMELERİN ÜRETİMİ VE MİKROYAPI ÖZELLİKLERİNİN İNCELENMESİ**

Yaman G., KARAKOÇ H., ÖZER M.

TASHKENT II-International Congress on Modern Sciences, Tashkent, Uzbekistan, 16 December 2022, vol.1, pp.352-353

- III. **AA7075 ALAŞIMINA UYGULANAN BİLYELİ HADDELEME İŞLEMİNDE İLERLEME HIZININ YÜZEY PÜRÜZLÜLÜĞÜNE ETKİSİ**

ÖMÜRLÜ B., ALTUNTAŞ O., ÖZER M.

3RD INTERNATIONAL AZERBAIJAN CONGRESS ON LIFE, ENGINEERING, AND APPLIED SCIENCES, Baku, Azerbaijan, 26 November 2022, pp.117-118

- IV. **EN AW 6063 AL ALAŞIMINA UYGULANAN SICAK EKSTRÜZYON VE T5 ISIL İŞLEMİNİN MİKROYAPI VE MEKANİK ÖZELLİKLERE ETKİSİ**

ÖZER M.

ANKARA V. ULUSLARARASI BİLİMSEL ARAŞTIRMALAR KONGRESİ, Ankara, Turkey, 10 - 12 October 2021, pp.27-37

- V. **THE EFFECT OF FEED SPEED ON SURFACE ROUGHNESS AND FATIGUE STRENGTH IN BURNISHING PROCESS APPLIED TO AL 7175-T6 ALLOY**

Dalli K., Özer M., Yılmaz T., Özer A.

3. Uluslararası Bakü Bilimsel Araştırmalar Kongresi, Baku, Azerbaijan, 15 - 16 October 2021, pp.1043-1050

- VI. **ELEKTRO-MANYETİK KARIŞTIRMA YÖNTEMİ İLE AA7050 ALAŞIMINDA TİKSOTROPİK ÖN-MALZEME**

## ÜRETİMİ

VADİ S., ÖZER A., ATAKUL S., ÖZER M.

7. ULUSLARARASI MUHENDİSLİK MİMARLIK VE TASARIM KONGRESİ, İstanbul, Turkey, 21 May 2021, pp.199-204

### VII. **Effects of Sintering Time on Density and Microstructure of Al-15Si-2.5Cu-0.5Mg / B4C Composites in Microwave Sintering Process**

Aydoğan S. İ., Özer M., Çinici H., Özer A.

International Conference on Advanced Materials Science Engineering and High Tech Devices Applications Exhibition (ICMATSE 2020), Ankara, Turkey, 2 - 04 October 2020, pp.70-74

### VIII. **Effects of Sintering Temperature on Density and Microstructure of Al-15Si-2.5Cu0.5Mg/B4C Composites**

Aydoğan S. İ., Özer M., Çinici H., Özer A.

International Conference on Advanced Materials Science Engineering and High Tech Devices Applications Exhibition (ICMATSE 2020), Ankara, Turkey, 2 - 04 October 2020, pp.44-49

### IX. **Influence of Cryogenic Treatment and Tempering on AISI H13 Hot Work Tool Steel**

ÖZER M., DAVUT K., ÖZER A.

19th International Metallurgy and Materials Congress, İstanbul, Turkey, 25 - 27 October 2018, pp.856-859

### X. **Östemperlenmiş Küresel Grafitli Dökme Demirlerde İndüksiyonla Yüzey Sertleştirme'nin Mikroyapı ve Yorulma Dayanımı Üzerine Etkisi**

OKTAY E., KILIÇLI V., ÖZER M., ERDOĞAN M.

1. Uluslararası Demir & Çelik Sempozyumu (IISS'12), 2 - 04 April 2012, pp.106-113

### XI. **The evaluation of structure property relationships in the dual matrix ductile iron by magnetic barkhausen noise analysis**

GÜR C. H., ÖZER M., ERDOĞAN M.

17th World Conference on Nondestructive Testing, Shanghai, China, 25 - 28 October 2008, vol.1, pp.25-28

### XII. **YARI KATI SICAKLIKTA BEKLETME SÜRESİNİN A357 ALAŞIMININ TİKSOTROPİK MİKROYAPISI ÜZERİNE ETKİLERİ**

ÖZER M., KOCATEPE K., ERDOĞAN M.

6th International Advanced Technologies Symposium, Elazığ, Turkey, 16 - 18 May 2011, pp.442-446

### XIII. **Küresel Grafitli Dökme Demirde Kritik Tavlama Sıcaklıklarından Su Verme ve Östemperleme Isıl İşlemlerinin Mikroyapı Oluşumuna Etkileri**

KILIÇLI V., ÖZER M., ERDOĞAN M.

4. Uluslararası İleri Teknolojiler Sempozyumu (4. IATS), 28 - 30 September 2005, pp.651-657

### XIV. **Küresel Grafitli Dökme Demirde Çift Fazlı Matris Yapının Üretimi ve Martensit Hacim Oranı ve Morfolojisinin Kontrolü**

KILIÇLI V., ÖZER M., ERDOĞAN M.

1. Ulusal Metalurji ve Malzeme Günleri, Turkey, 27 - 28 May 2004, pp.143-152

## Supported Projects

Özer M., Yılmaz T., Altuntaş G., Project Supported by Higher Education Institutions, Alüminyum alaşımının döküm yöntemiyle üretimi, 2023 - 2023

ÖZER M., ALTUNTAŞ G., YILMAZ T., Project Supported by Higher Education Institutions, Alüminyum Alaşımının Döküm Yöntemi ile Üretimi, 2022 - 2023

Özer M., Dalli K., Özer A., Project Supported by Higher Education Institutions, AlZn5.5MgCu Al alaşımına uygulanan yüzey haddeleme işleminin mekanik özelliklere etkisi, 2019 - 2022

ÖZER M., ÖZER A., VADİ S., ATAKUL S., Project Supported by Higher Education Institutions, YARI-KATI ŞEKİLLENDİRME İÇİN ELEKTRO-MANYETİK KARIŞTIRMA YÖNTEMİ İLE ÖN MALZEME ÜRETİMİ, 2020 - 2021

Özer A., Çinici H., Özer M., Aydoğan S. İ., Project Supported by Higher Education Institutions, Toz metalurjisi Yöntemiyle Üretilmiş B4C Takviyeli Önalaşım Al Kompozitlerin Özellikleri Üzerine sinterleme Yöntemlerinin Etkisi, 2019 - 2021

Özer M., Erdoğan M., Kılıçlı V., Ovalı İ., Project Supported by Higher Education Institutions, Küresel Grafitli Dökme

Demirlerin Yüzeyinde Çil oluşumunun araştırılması ve karakterizasyonu, 2011 - 2013

Özer M., Erdoğan M., Kılıçlı V., Oktay E., Project Supported by Higher Education Institutions, Östemperlenmiş Küresel Grafitli Dökme Demirlerde İndüksiyonla Yüzey sertleştirme işleminin mikroyapı ve yorulma dayanımı üzerine etkisi, 2010 - 2012

Özer M., Kocatepe K., Erdoğan M., Kılıçlı V., Project Supported by Higher Education Institutions, Yarı Katı Döküm Tekniği ile Üretilen Al Si Alaşımlarında Yapı Özellik İlişkisinin İncelenmesi, 2007 - 2010

Kocatepe K., Erdoğan M., Akar N., Yalçın N., Tüzüenalp K. K., Kılıçlı V., Özer M., Project Supported by Other Official Institutions, Yarı katı Döküm Tekniği (Semi-Solid Metal Casting) ile ETİAL 177 ve ETİAL 44 Alaşımlarının Dökümü, 2004 - 2007

Özer M., Kocatepe K., Erdoğan M., Kılıçlı V., Tüzüenalp K. K., Akar N., Yalçın N., EU Supported Other Project, EU Mobility LdV II Project "Modenization of casting factories and laboratories in EU", 2005 - 2005

Özer M., Kocatepe K., Kılıçlı V., Project Supported by Higher Education Institutions, Küresel Grafitli Dökme Demirlerde Kısmi Östenitleme Zamanının ve Martensit Hacim Oranı ve Parçacık Boyutunun Mekanik Özelliklere Etkisi, 2003 - 2005

## Activities in Scientific Journals

Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, Editor, 2022 - Continues

## Tasks In Event Organizations

Özer A., Özer M., INTERNATIONAL CONFERENCE ON ADVANCED MATERIALS SCIENCE & ENGINEERING AND HIGH TECH DEVICE APPLICATIONS, Scientific Congress, Ankara, Turkey, Ekim 2022

Özer M., Özer A., 5. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, Scientific Congress, Nevşehir, Turkey, Eylül 2022

Özer M., International Conference on Advanced Materials Science and Engineering and High Tech Device Applications, Scientific Congress, Ankara, Turkey, Ekim 2020

Özer A., ÖZER M., 3. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology , Scientific Congress, Turkey, Haziran 2020

Özer M., The International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Cappadocia / TURKEY, Scientific Congress, Nevşehir, Turkey, Haziran 2019

## Metrics

Publication: 34

Citation (WoS): 180

Citation (Scopus): 197

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