

## Dr. Öğr. Üyesi EMRE ÇINKILIÇ

### Kişisel Bilgiler

E-posta: emrecinkilic@hakkari.edu.tr

Web: <https://avesis.hakkari.edu.tr/emrecinkilic>

### Uluslararası Araştırmacı ID'leri

ScholarID: 9MZ9oEsAAAAJ

ORCID: 0000-0001-7632-4843

ScopusID: 55768061500

Yoksis Araştırmacı ID: 349786

### Eğitim Bilgileri

Doktora, Ohio State University {Ohio}, Amerika Birleşik Devletleri 2013 - 2019

Yüksek Lisans, Ohio State University {Ohio}, Amerika Birleşik Devletleri 2011 - 2013

Lisans, Dokuz Eylül Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Türkiye 2004 - 2009

### Yabancı Diller

İngilizce, C2 Ustalık

### Yaptığı Tezler

Doktora, Alloy Design and Precipitation Modeling of High Fe Concentration Recycled Cast Aluminum Alloys for Structural Applications, Ohio State University {Ohio}, 2019

Yüksek Lisans, Comparison of Interface State Spectroscopy Techniques by Characterizing Dielectric - InGaAs Interfaces, Ohio State University {Ohio}, 2013

### Araştırma Alanları

Malzeme Testi ve Kontrolü, Fiziksel Özellikler, İntermetalikler, Fiziksel Metalurji, Isıl İşlem, Malzeme Karakterizasyonu, Metalik Malzemeler, Yapı-Özellik İlişkisi, Demir Dışı Metal Üretimi, Geri Dönüşüm Süreçleri

### Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Hakkari Üniversitesi, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği, 2021 - Devam Ediyor

Araştırma Görevlisi, Ohio State University, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği, 2013 - 2019

Araştırma Görevlisi, Ohio State University, Mühendislik Fakültesi, Elektrik Ve Bilgisayar Mühendisliği, 2011 - 2013

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

1. The Beneficial Effect of Iron in Aluminum-Cerium-Based Cast Alloys

Moodispaw M. P., ÇİNKİLİÇ E., Miao J., Luo A. A.

Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, cilt.55, sa.5, ss.1351-1362, 2024 (SCI-Expanded)

- II. **Strontium Effects on the Formation of Iron-Intermetallic Phases in Secondary Al-9Si-0.6Fe Alloys**  
Balasubramani N., Moodispaw M., ÇİNKİLİÇ E., Miao J., Luo A. A.  
Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, cilt.55, sa.2, ss.550-568, 2024 (SCI-Expanded)
- III. **Thermodynamic Modeling of Solid Flux Interactions with Molten Aluminum**  
Moodispaw M. P., ÇİNKİLİÇ E., Luo A. A.  
International Journal of Metalcasting, 2024 (SCI-Expanded)
- IV. **Optimization of T5 heat treatment in high pressure die casting of Al-Si-Mg-Mn alloys by using an improved Kampmann-Wagner numerical (KWN) model**  
Zhang J., ÇİNKİLİÇ E., Huang X., Wang G. G., Liu Y. (., Weiler J., Luo A. A.  
Materials Science and Engineering: A, cilt.865, 2023 (SCI-Expanded)
- V. **A New Recycled Al-Si-Mg Alloy for Sustainable Structural Die Casting Applications**  
ÇİNKİLİÇ E., Moodispaw M., Zhang J., Miao J., Luo A. A.  
Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, cilt.53, sa.8, ss.2861-2873, 2022 (SCI-Expanded)
- VI. **On the interactions between molten aluminum and high entropy alloy particles during aluminum matrix composite processing**  
Huang X., Zhang J., Miao J., ÇİNKİLİÇ E., Wang Q., Luo A. A.  
Journal of Alloys and Compounds, cilt.895, 2022 (SCI-Expanded)
- VII. **Modeling precipitation hardening and yield strength in cast Al-Si-Mg-Mn alloys**  
ÇİNKİLİÇ E., Yan X., Luo A. A.  
Metals, cilt.10, sa.10, ss.1-14, 2020 (SCI-Expanded)
- VIII. **Predicting gas and shrinkage porosity in solidification microstructure: A coupled three-dimensional cellular automaton model**  
Gu C., Ridgeway C. D., ÇİNKİLİÇ E., Lu Y., Luo A. A.  
Journal of Materials Science and Technology, cilt.49, ss.91-105, 2020 (SCI-Expanded)
- IX. **A Formation Map of Iron-Containing Intermetallic Phases in Recycled Cast Aluminum Alloys**  
ÇİNKİLİÇ E., Ridgeway C., Yan X., Luo A.  
Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, cilt.50, sa.12, ss.5945-5956, 2019 (SCI-Expanded)
- X. **Three-dimensional cellular automaton simulation of coupled hydrogen porosity and microstructure during solidification of ternary aluminum alloys**  
Gu C., Lu Y., Ridgeway C. D., ÇİNKİLİÇ E., Luo A. A.  
Scientific Reports, cilt.9, sa.1, 2019 (SCI-Expanded)
- XI. **Predicting grain structure in high pressure die casting of aluminum alloys: A coupled cellular automaton and process model**  
Gu C., Lu Y., ÇİNKİLİÇ E., Miao J., Klarner A., Yan X., Luo A. A.  
Computational Materials Science, cilt.161, ss.64-75, 2019 (SCI-Expanded)
- XII. **Investigation of the non-equilibrium solidification microstructure of a Mg-4Al-2RE (AE42) alloy**  
Sun W., Shi X., ÇİNKİLİÇ E., Luo A. A.  
Journal of Materials Science, cilt.51, sa.13, ss.6287-6294, 2016 (SCI-Expanded)
- XIII. **Impact of proton irradiation on deep level states in n-GaN**  
Zhang Z., Arehart A., ÇİNKİLİÇ E., Chen J., Zhang E., Fleetwood D., Schrimpf R., McSkimming B., Speck J., Ringel S.  
Applied Physics Letters, cilt.103, sa.4, 2013 (SCI-Expanded)
- XIV. **Interface trap characterization of atomic layer deposition Al<sub>2</sub>O<sub>3</sub>/GaN metal-insulator-semiconductor capacitors using optically and thermally based deep level spectroscopies**  
Jackson C. M., Arehart A. R., ÇİNKİLİÇ E., McSkimming B., Speck J. S., Ringel S. A.  
Journal of Applied Physics, cilt.113, sa.20, 2013 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Characterization and modeling of concurrent precipitation in Mg-Al-Sn alloys using an improved Kampmann-Wagner numerical (KWN) model**  
Miao J., Zhang C., Klarner A. D., Zhang J., ÇİNKİLİÇ E., Zhang F., Luo A. A.  
Materialia, cilt.21, 2022 (Scopus)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **Effect of Vacuum Level on Porosity and Mechanical Properties of Aluminum Alloys in High Pressure Die Casting**  
Trometer N., ÇİNKİLİÇ E., Godlewski L., Prabhu E., Luo A.  
MS&T21 Materials Science and Technology, Columbus, Amerika Birleşik Devletleri, 17 Kasım 2021
- II. **Increasing Melt Efficiency and Secondary Alloy Usage in Aluminum Die Casting**  
Luo A., ÇİNKİLİÇ E., Moodispaw M., Zhang J., Yan X., Caron F., Brancleon P.  
Die Casting Congress and Exposition, Indianapolis, Amerika Birleşik Devletleri, 04 Ekim 2021
- III. **Melt-Refractory Interactions During Aluminum Melt Processing**  
ÇİNKİLİÇ E., Moodispaw M., Luo A., Chu Y., Yan X., Caron F.  
Metalcasting Congress 2021, Amerika Birleşik Devletleri, 12 Nisan 2021
- IV. **Thermodynamic Modeling of Solid Flux Interactions with Molten Aluminum**  
Moodispaw M., ÇİNKİLİÇ E., Luo A.  
Metalcasting Congress 2021, Amerika Birleşik Devletleri, 12 Nisan 2021
- V. **Use of CALPHAD Modeling in Controlling the Microstructure of Cast Aluminum Alloys**  
ÇİNKİLİÇ E., Klarner A., Sun W., Luo A.  
American Foundry Society 119th Metalcasting Congress, Columbus, Amerika Birleşik Devletleri, 20 Nisan 2015

## **Metrikler**

Yayın: 20

Atf (Scopus): 283

H-İndeks (Scopus): 10

## **Akademi Dışı Deneyim**

Şirket, Alcoa, Alcoa Technical Center