

## Dr. Öğr. Üyesi IRMAK SARGIN

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: ABI-8454-2020

ScopusID: 57063081500

Yoksis Araştırmacı ID: 164329

### Eğitim Bilgileri

Doktora, Iowa State University of Science and Technology, Amerika Birleşik Devletleri 2011 - 2015

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Türkiye 2008 - 2011

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, Türkiye 2003 - 2008

### Araştırma Alanları

Metalurji ve Malzeme Mühendisliği, Cam Teknolojisi ve Cam-Seramikler, Fiziksel Metalurji, Metalik Malzemeler, Yapı-Özellik İlişkisi

### Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2021 - Devam Ediyor

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

- I. **Putting error bars on density functional theory**  
Yuk S. F., SARGIN I., Meyer N., Krogel J. T., Beckman S. P., Cooper V. R.  
Scientific Reports, cilt.14, sa.1, 2024 (SCI-Expanded)
- II. **Flow mechanisms and their influence on the properties of EGAln-graphene-poly(ethylene) oxide composites during material extrusion-based additive manufacturing**  
Tandel R., SARGIN I., Gozen B. A.  
Additive Manufacturing, cilt.84, 2024 (SCI-Expanded)
- III. **Mapping of composition-rheology relationships in polymer composite-type precursors**  
Grover C. A., Bernal C. B., SARGIN I., Beckman S. P., Gozen B. A.  
Polymer Composites, 2024 (SCI-Expanded)
- IV. **Multivariate analysis: An essential for studying complex glasses**  
SARGIN I., McCloy J. S., Beckman S. P.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, cilt.105, sa.12, ss.7196-7210, 2022 (SCI-Expanded)

- V. **Predicting nepheline precipitation in waste glasses using ternary submixture model and machine learning**  
Lu X., Sargin I., Vienna J. D.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, cilt.104, sa.11, ss.5636-5647, 2021 (SCI-Expanded)
- VI. **A data-driven approach for predicting nepheline crystallization in high-level waste glasses**  
Sargin I., Lonergan C. E., Vienna J. D., McCloy J. S., Beckman S. P.  
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, cilt.103, sa.9, ss.4913-4924, 2020 (SCI-Expanded)
- VII. **Modeling the effect of dose rate and time on crosslinking and scission in irradiated polyethylene**  
Sargin I., Beckman S. P.  
IEEE TRANSACTIONS ON DIELECTRICS AND ELECTRICAL INSULATION, cilt.27, sa.3, ss.731-738, 2020 (SCI-Expanded)
- VIII. **A data-informatics method to quantitatively represent ternary eutectic microstructures**  
Sargin I., Beckman S. P.  
SCIENTIFIC REPORTS, cilt.9, 2019 (SCI-Expanded)
- IX. **Modeling of reaction-diffusion transport into a core-shell geometry**  
King C. C., Brown A. A., Sargin I., Bratlie K. M., Beckman S. P.  
JOURNAL OF THEORETICAL BIOLOGY, cilt.460, ss.204-208, 2019 (SCI-Expanded)
- X. **Crystal orientation relationships in ternary eutectic Al-Al<sub>2</sub>Cu-Ag<sub>2</sub>Al**  
Steinmetz P., Dennstedt A., ŞEREFOĞLU KAYA M., Sargin I., Genau A., Hecht U.  
ACTA MATERIALIA, cilt.157, ss.96-105, 2018 (SCI-Expanded)
- XI. **Influence of growth velocity variations on the pattern formation during the directional solidification of ternary eutectic Al-Ag-Cu**  
Hoetzer J., Steinmetz P., Dennstedt A., Genau A., Kellner M., Sargin I., Nestler B.  
ACTA MATERIALIA, cilt.136, ss.335-346, 2017 (SCI-Expanded)
- XII. **Post-solidification Effects in Directionally Grown Al-AgAl-AlCu Eutectics**  
Sargin I., Genau A. L., Napolitano R. E.  
JOURNAL OF PHASE EQUILIBRIA AND DIFFUSION, cilt.37, sa.1, ss.75-85, 2016 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Machine learning to predict refractory corrosion during nuclear waste vitrification**  
Smith-Gray N. J., Sargin I., Beckman S., McCloy J.  
MRS ADVANCES, cilt.6, sa.4-5, ss.131-137, 2021 (ESCI)

## **Metrikler**

Yayın: 14

Atf (WoS): 101

Atf (Scopus): 110

H-İndeks (WoS): 6

H-İndeks (Scopus): 6

## **Kongre ve Sempozyum Katılımı Faaliyetleri**

Glass and Optical Materials Division (GOMD), Katılımcı, Maryland, Amerika Birleşik Devletleri, 2022