

## Doç. Dr. MURAT IŞIK

### Kişisel Bilgiler

Web: <https://avesis.uludag.edu.tr/muratisik>

### Uluslararası Araştırmacı ID'leri

ScholarID: AAB-3379-2020

ORCID: 0000-0002-6116-1882

Publons / Web Of Science ResearcherID: GQP-1784-2022

ScopusID: 57439755400

Yoksis Araştırmacı ID: 365820

### Eğitim Bilgileri

Doktora, Tohoku University, Department of Engineering, Metallurgy, Materials Science and Processing, Japonya 2013 - 2016

### Araştırma Alanları

Makina Mühendisliği, Malzeme Bilimi ve Mühendisliği, Üretim Metalurjisi

### Akademik İdari Deneyim

Bölüm Başkan Yardımcısı, Bursa Uludağ Üniversitesi, 2023 - 2026

Anabilim/Bilim Dalı Başkanı, Bursa Uludağ Üniversitesi, MÜHENDİSLİK FAKÜLTESİ, OTOMOTİV MÜHENDİSLİĞİ, 2022 - 2025

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

- I. **The effect of additively and subtractively created center internal features on microstructure and mechanical performance of inconel-718 parts**  
Işık M.  
RAPID PROTOTYPING JOURNAL, cilt.30, sa.2, ss.287-304, 2024 (SCI-Expanded)
- II. **Fabrication of Electron Beam Melted Titanium Aluminide: The Effects of Machining Parameters and Heat Treatment on Surface Roughness and Hardness**  
Işık M.  
METALS, cilt.13, sa.12, ss.1952-1969, 2023 (SCI-Expanded)
- III. **Investigation of the Influence of High-Pressure Torsion and Solution Treatment on Corrosion and Tribocorrosion Behavior of CoCrMo Alloys for Biomedical Applications**  
Işık M.  
CRYSTALS, cilt.13, sa.4, ss.590-604, 2023 (SCI-Expanded)
- IV. **Additive manufacturing and characterization of a stainless steel and a nickel alloy**  
Işık M.  
MATERIALPRUEFUNG/MATERIALS TESTING, cilt.65, sa.3, ss.378-388, 2023 (SCI-Expanded)
- V. **High-speed machining of additively manufactured Inconel 718 using hybrid cryogenic cooling**

## methods

Bagherzadeh A., Koc B., Budak E., Isik M.

VIRTUAL AND PHYSICAL PROTOTYPING, cilt.17, sa.3, ss.419-436, 2022 (SCI-Expanded)

- VI. **A thermal finite element model with efficient computation of surface heat fluxes for directed-energy deposition process and application to laser metal deposition of IN718**  
Dortkasli K., Isik M., Demir E.  
Journal of Manufacturing Processes, cilt.79, ss.369-382, 2022 (SCI-Expanded)
- VII. **A numerical methodology for monitoring stress distributions and experimental proof of the concept on metal embedded thin polymer-matrix composites using X-ray Diffraction**  
Demir E., Sas H. S., Isik M., Gungor E. A., Davut K.  
THIN-WALLED STRUCTURES, cilt.173, 2022 (SCI-Expanded)
- VIII. **Alumina and tricalcium phosphate added CoCr alloy for load-bearing implants**  
Isik M., Avila J. D., Bandyopadhyay A.  
ADDITIVE MANUFACTURING, cilt.36, 2020 (SCI-Expanded)
- IX. **Titanium-Silicon on CoCr Alloy for Load-Bearing Implants Using Directed Energy Deposition-Based Additive Manufacturing**  
Avila J. D., Isik M., Bandyopadhyay A.  
ACS APPLIED MATERIALS & INTERFACES, cilt.12, sa.46, ss.51263-51272, 2020 (SCI-Expanded)
- X. **Additively manufactured calcium phosphate reinforced CoCrMo alloy: Bio-tribological and biocompatibility evaluation for load-bearing implants**  
Bandyopadhyay A., Shivaram A., Isik M., Avila J. D., Dernel W. S., Bose S.  
ADDITIVE MANUFACTURING, cilt.28, ss.312-324, 2019 (SCI-Expanded)
- XI. **Microstructural evolution and mechanical properties of biomedical Co-Cr-Mo alloy subjected to high-pressure torsion**  
Isik M., Niinomi M., Cho K., Nakai M., Liu H., Yilmazer H., Horita Z., Sato S., Narushima T.  
JOURNAL OF THE MECHANICAL BEHAVIOR OF BIOMEDICAL MATERIALS, cilt.59, ss.226-235, 2016 (SCI-Expanded)
- XII. **The Effect of Post-Heat Treatment on Microstructure of 316L Cold-Sprayed Coatings and Their Corrosion Performance**  
DİKİCİ B., YILMAZER H., Ozdemir I., Isik M.  
JOURNAL OF THERMAL SPRAY TECHNOLOGY, cilt.25, sa.4, ss.704-714, 2016 (SCI-Expanded)
- XIII. **Grain Refinement Mechanism and Evolution of Dislocation Structure of Co-Cr-Mo Alloy Subjected to High-Pressure Torsion**  
Isik M., Niinomi M., Liu H., Cho K., Nakai M., Horita Z., Sato S., Narushima T., YILMAZER H., Nagasako M.  
MATERIALS TRANSACTIONS, cilt.57, sa.7, ss.1109-1118, 2016 (SCI-Expanded)
- XIV. **Optimization of Microstructure and Mechanical Properties of Co-Cr-Mo Alloys by High-Pressure Torsion and Subsequent Short Annealing**  
Isik M., Niinomi M., Liu H., Cho K., Nakai M., Horita Z., Narushima T., Ueda K.  
MATERIALS TRANSACTIONS, cilt.57, sa.11, ss.1887-1896, 2016 (SCI-Expanded)
- XV. **Microstructural Analysis of Biomedical Co-Cr-Mo Alloy Subjected to High-Pressure Torsion Processing**  
IŞIK M.  
KEY ENGINEERING MATERIALS, cilt.616, 2014 (SCI-Expanded)

## Diğer Dergilerde Yayınlanan Makaleler

- I. **Doğrudan enerji biriktirmesi ve seçimli lazer ergitmesi uygulamalarının Inconel 718 mikroyapısında yol açtığı değişimler**  
Isik M.  
Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, cilt.12, sa.1, ss.272-279, 2023 (Hakemli Dergi)
- II. **Directed energy deposition process development for functionally gradient Copper-Inconel 718**

## materials

IŞIK M.

Journal of Additive Manufacturing Technologies, cilt.1, sa.3, ss.581, 2021 (Hakemli Dergi)

### III. **Topology optimization and finite elemental analysis for an inconel 718 engine mounting bracket manufactured via electron beam melting**

IŞIK M.

Topology optimization and manufacturing of engine bracket using electron beam melting, cilt.1, sa.3, ss.583, 2021 (Hakemli Dergi)

## Desteklenen Projeler

Işık M., TÜBİTAK Projesi, Elektrikli Taşıtlar İçin Batarya Teknolojileri Araştırma Ve Geliştirme Platformu (Bateg), 2023 - 2026

Işık M., TÜBİTAK Projesi, Eklemeli İmalat ile üretilmiş parça yüzeylerinin iyileştirilmesi için kuru elektro-parlatma yöntemi geliştirilmesi, 2022 - 2025

Işık M., Koç B., Aydoğan Gungor E., Ünel M., TÜBİTAK Projesi, YENİ NESİL 3BOYUTLU YAZICI İMALAT TEKNOLOJİLERİ, 2021 - 2025

## Metrikler

Yayın: 19

Atıf (WoS): 164

Atıf (Scopus): 175

H-İndeks (WoS): 8

H-İndeks (Scopus): 8