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### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Metalurji Ve Malzeme Mühendisliği, Turkey 2012 - 2017

Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Metal Eğitimi, Turkey 2004 - 2009

### Foreign Languages

English, B1 Intermediate

### Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Mechanical Properties, Composites, Material Characterization, Engineering and Technology

### Academic Titles / Tasks

Lecturer, Hacettepe University, Hacettepe Ankara Sanayi Odası 1. Osb Meslek Yüksekokulu, 2013 - Continues

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

- I. **Study on the wear characteristics of INCO939 alloy manufactured by laser powder bed fusion and casting.**  
KARABULUT Ş., KARAKOÇ H., BİLGİN M., Subaşı L., Dursun G., Ozaner O. C.  
Tribology International, vol.194, 2024 (SCI-Expanded)
- II. **Comparative study of hardfacing applications on structural steel surfaces to improve ballistic properties**  
Sözeri M., ÖZDEMİR U., FINDIK T., KARAKOÇ H.  
Materials Today Communications, vol.38, 2024 (SCI-Expanded)
- III. **Effect of process parameters of Al5083/SiC surface composites fabricated by FSP on microstructure, mechanical properties and wear behaviors**  
Kaya N., ÇETİNKAYA C., KARAKOÇ H., ADA H.

Materials Chemistry and Physics, vol.315, 2024 (SCI-Expanded)

- IV. **Influence of gradation in the reinforcement particles on the interfacial microstructure and mechanical properties of functionally graded composites**  
KARAKOÇ H., ÇİNİCİ H., Saravana Kumar M., YILMAZ T., Ovalı İ., Yang C., Arjunan A.  
Materials Today Communications, vol.38, 2024 (SCI-Expanded)
- V. **Study on the friction drilling behaviors and tribological properties of aluminum matrix composites**  
KARAKOÇ H., BİLGİN M., KARABULUT Ş.  
Materials Today Communications, vol.38, 2024 (SCI-Expanded)
- VI. **Electrochemical, mechanical, and antibacterial properties of the AZ91 Mg alloy by hybrid and layered hydroxyapatite and tantalum oxide sol-gel coating**  
ALBAYRAK S., Gül C., Emin N., GÖKMEN U., KARAKOÇ H., Uzun A., ÇİNİCİ H.  
Materialpruefung/Materials Testing, vol.65, no.11, pp.1628-1644, 2023 (SCI-Expanded)
- VII. **Effect of SiC Particle Size on the Mechanical and Wear Behavior of Al356 Metal Matrix Composites**  
KARAKOÇ H.  
Silicon, vol.15, no.15, pp.6729-6744, 2023 (SCI-Expanded)
- VIII. **Mechanical Properties of Al<sub>2</sub>O<sub>3</sub>/Al<sub>2</sub>O<sub>3</sub>/MgO/Graphite composites via hydro-thermal hot pressing route**  
Ovalı İ., Esen C., ALBAYRAK S., KARAKOÇ H., Saravana Kumar M., Yang C.  
Materials Chemistry and Physics, vol.302, 2023 (SCI-Expanded)
- IX. **Microstructural properties and impact behavior of AA5083/Al<sub>2</sub>O<sub>3</sub> functionally graded composite material with surface foam layer produced through powder metallurgy**  
Ardıçoğlu H., KARAKOÇ H., Çinici H.  
Materials Today Communications, vol.35, 2023 (SCI-Expanded)
- X. **Investigation of microstructure, mechanical, and tribological properties of SiC/h-BN/Gr hybrid reinforced Al6061 matrix composites produced by hot extrusion method**  
Çinici H., KARAKOÇ H., ŞAHİN Ö., Ovalı İ.  
Diamond and Related Materials, vol.136, 2023 (SCI-Expanded)
- XI. **A comparative study on mechanical and ballistic performance of functionally graded Al6061 composites reinforced with B<sub>4</sub>C, SiC, and Al<sub>2</sub>O<sub>3</sub>**  
KARABULUT Ş., KARAKOÇ H., BİLGİN M., Canpolat H., Krolczyk G. M., Sarıkaya M.  
Journal of Materials Research and Technology, vol.23, pp.5050-5065, 2023 (SCI-Expanded)
- XII. **Performance analysis on mechanical and machinability attributes of Al6061-B<sub>4</sub>C-T<sub>6</sub> composites processed via hot extrusion**  
Tinga S., KARAKOÇ H., YAĞMUR S., Saravana Kumar M., ŞEKER U., ÇITAK R.  
Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture, 2023 (SCI-Expanded)
- XIII. **A study on the influence of thermally assisted novel hybrid methods on the drilling behavior of Ti6Al4V alloy**  
KARABULUT Ş., BİLGİN M., KARAKOÇ H., Khanna N., Sarıkaya M.  
TRIBOLOGY INTERNATIONAL, vol.175, 2022 (SCI-Expanded)
- XIV. **Study of the Heat-Assisted Milling of Ti-6Al-4V Under Dry and Minimum-Quantity-Lubrication**  
KARABULUT Ş., BİLGİN M., KARAKOÇ H., Skondras Giousios D., Markopoulos A. P.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.47, no.7, pp.9287-9304, 2022 (SCI-Expanded)
- XV. **Wear and mechanical properties of Al6061/SiC/B<sub>4</sub>C hybrid composites produced with powder metallurgy**  
KARAKOÇ H., OVALI İ., Dundar S., ÇITAK R.  
JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, vol.8, no.6, pp.5348-5361, 2019 (SCI-Expanded)
- XVI. **Study on mechanical and ballistic performances of boron carbide reinforced Al 6061 aluminum alloy produced by powder metallurgy**  
KARAKOÇ H., KARABULUT Ş., Citak R.  
COMPOSITES PART B-ENGINEERING, vol.148, pp.68-80, 2018 (SCI-Expanded)

- XVII. **Investigation of surface roughness in the milling of Al7075 and open-cell SiC foam composite and optimization of machining parameters**  
 KARABULUT Ş., KARAKOÇ H.  
 NEURAL COMPUTING & APPLICATIONS, vol.28, no.2, pp.313-327, 2017 (SCI-Expanded)
- XVIII. **Investigation of mechanical properties of tubular aluminum foams**  
 UZUN A., KARAKOÇ H., GÖKMEN U., Cinici H., TÜRKER M.  
 INTERNATIONAL JOURNAL OF MATERIALS RESEARCH, vol.107, no.11, pp.996-1004, 2016 (SCI-Expanded)
- XIX. **Influence of B4C particle reinforcement on mechanical and machining properties of Al6061/B4C composites**  
 KARABULUT Ş., KARAKOÇ H., Citak R.  
 COMPOSITES PART B-ENGINEERING, vol.101, pp.87-98, 2016 (SCI-Expanded)
- XX. **Experimental Investigation and Optimization of Cutting Force and Tool Wear in Milling Al7075 and Open-Cell SiC Foam Composite**  
 KARABULUT Ş., Cinici H., KARAKOÇ H.  
 ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.41, no.5, pp.1797-1812, 2016 (SCI-Expanded)
- XXI. **Mechanical and ballistic properties of powder metal 7039 aluminium alloy joined by friction stir welding**  
 Erdem M., Cinici H., GÖKMEN U., KARAKOÇ H., TÜRKER M.  
 TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, vol.26, no.1, pp.74-84, 2016 (SCI-Expanded)
- XXII. **Laser surface treatment of aluminum based composite mixed with B4C particles**  
 YILBAS B. S., KARATAS C., KARAKOÇ H., ALEEM B. J. A., KHAN S., AL-AQEELI N.  
 OPTICS AND LASER TECHNOLOGY, vol.66, pp.129-137, 2015 (SCI-Expanded)
- XXIII. **INVESTIGATION OF THE PENETRATION BEHAVIOR OF AISi7 FOAM, PRODUCED BY POWDER METALLURGY METHOD, UNDER LOW-VELOCITY IMPACT ENERGIES**  
 Cinici H., Gokmen U., UZUN A., KARAKOÇ H., Gode C., Turker M.  
 JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.29, no.2, pp.395-400, 2014 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Production of Powder Metal Al7075/B4C/Si3N4 Composite Materials and Investigation of Wear Properties**  
 KARAKOÇ H.  
 JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.23, no.4, pp.1141-1151, 2020 (ESCI)
- II. **B4C/SiC/Al2O3 Particle Reinforced Aluminum Sandwich Foam and Ramor 500 Armor Steel to be Combined and Investigation of the Ballistic Performance**  
 KARAKOÇ H., ULUTAŞ A., Cinici H.  
 JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.23, no.2, pp.297-310, 2020 (ESCI)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Fabrication of AA6061/B4C Composites and Investigation of Ballistic Performances**  
 KARAKOÇ H., Cinici H., KARABULUT Ş., Citak R.  
 8th International Conference on Mechanical and Aerospace Engineering (ICMAE), Prague, Czech Republic, 22 - 25 July 2017, pp.822-825
- II. **Effect of the B4C Reinforcement Ratio on Surface Roughness of Al6061 Based Metal Matrix Composite in Wire-EDM Machining**  
 KARABULUT Ş., KARAKOÇ H., Citak R.  
 8th International Conference on Mechanical and Aerospace Engineering (ICMAE), Prague, Czech Republic, 22 - 25

## Supported Projects

- Karabulut Ş., Okyayuz A. Ş., Erkazancı Durmuş H., Oral A. Z., Bilgin M., Altuntaş O., Karakoç H., Kökçan R., Erasmus Project, Giving A Voice to Deaf People in Metal Sector, 2019 - 2022
- KARAKOÇ H., KARABULUT Ş., ÇITAK R., Project Supported by Higher Education Institutions, Vakum İnfüzyon Yöntemi ile Kevlar/Karbon Fiber Kompozit Malzemelerin Üretimi, 2017 - 2019
- KARAKOÇ H., ÇİNİCİ H., ALBAYRAK S., ÇITAK R., Project Supported by Higher Education Institutions, Al Köpük Dolgulu İnce Duvarlı Al6061B4C Profil Üretimi, 2017 - 2018
- KARAKOÇ H., ÇİNİCİ H., ÇITAK R., Project Supported by Higher Education Institutions, A6061B4C Kompozitlerin Üretimi ve Balistik Performansının İncelenmesi Üzerine Deneysel Bir Çalışma, 2017 - 2017
- KARABULUT Ş., KARAKOÇ H., ÇITAK R., Project Supported by Higher Education Institutions, Al6061B4C Metal Matrisli Kompozitin Tel Erozyon Tezghında İşlenmesinin yüzey pürüzlülüğü üzerine deneysel çalışma, 2017 - 2017
- KARABULUT Ş., KALKAN Ö. K., KARAKOÇ H., COŞGUNER T., Project Supported by Higher Education Institutions, Meslek Yüksekokulu Öğrencilerinin Akademik Başarılarının Bazı Değişkenler Açısından İncelenmesi: Hacettepe ASO 1 OSB, Denizli Teknik Bilimler MYO Örneği, 2017 - 2017
- TUBITAK Project, Fonksiyonel Derecelendirilmiş Al7xxx/B4C Köpük Metallerin Üretimi, Darbe Enerjileri Altında Penetrasyon Davranışı, Balistik Ve Radyasyon Zırhlama Performansının Belirlenmesi, 2015 - 2017
- KARABULUT Ş., TAŞCI U., GÖKMEN U., KARAKOÇ H., KIRMIZI G., Project Supported by Higher Education Institutions, Alumix 231 Esaslı SiC ve Al2O3 Takviyeli HibritKompozit Üretimi ve Karakterizasyonu, 2016 - 2016
- KARABULUT Ş., UZEL M., HASTÜRK E. Y., KALKAN Ö. K., KARAKOÇ H., KÖKÇAN R., KARATAŞ C., KADEMLİ M., AY İ., BİLGİN M., Project Supported by Higher Education Institutions, Yenilikçi Tasarım Uygulamaları, 2015 - 2016
- KARAKOÇ H., Project Supported by Higher Education Institutions, B4C Takviyelendirilmiş Alüminyum Esaslı Kompozit Malzeme Yüzeyinin Lazer ile İşlenmesi, 2015 - 2016
- KARAKOÇ H., ÇİNİCİ H., ÇITAK R., Project Supported by Higher Education Institutions, ALUMİX 13 ESASLI METALİK KÖPÜKLERİN TOZ METALURJİSİ YÖNTEMİ İLE ÜRETİMİ, 2015 - 2015
- KARABULUT Ş., KALKAN Ö. K., KARAKOÇ H., ÇITAK R., Project Supported by Higher Education Institutions, AA6061B4Cpnin tel erozyon tezghında işlenmesinde yüzey pürüzlülüğünün yüzey yanıt metodu ile optimizasyonun yapılması, 2015 - 2015
- TUBITAK Project, PATLAMA ETKİSİNE KARŞI KORUYUCU ZIRH GELİŞTİRİLMESİ, 2010 - 2011

## Metrics

- Publication: 27  
Citation (WoS): 197  
Citation (Scopus): 281  
H-Index (WoS): 6  
H-Index (Scopus): 8

## Non Academic Experience

- Hacettepe Üniversitesi Hacettepe ASO 1.OSB Meslek Yüksekokulu  
Gazi Üniversitesi Ostim Meslek Yüksekokulu  
Gazi Üniversitesi Endüstriyel Ürün Tasarım Öğretmenliği Bölümü  
Gazi Üniversitesi Metal Eğitimi Bölümü