

## Asst. Prof. ABDULLAH SERT

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: E-4547-2015

ScopusID: 56089725600

Yoksis Researcher ID: 171108

### Education Information

Doctorate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Turkey 2011 - 2017

Postgraduate, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Makine

Mühendisliği (YI) (Tezli), Turkey 2008 - 2010

Undergraduate, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ,

Makine Mühendisliği Bölümü, Turkey 2004 - 2008

### Dissertations

Doctorate, Ti6Al4V alaşımının buzul işlem uygulanmış WC-Co karbür takımlar ile talaşlı imalatının iyileştirilmesi, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Makine Mühendisliği (Dr), 2017

Postgraduate, Sürtünme karıştırma prosesi ile yüzeyine sic partikül takviye edilmiş Al 7075-T651 alüminyum alaşımının mikro yapı ve aşınma özelliklerinin incelenmesi, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Makine Mühendisliği (YI) (Tezli), 2010

### Research Areas

Tribology, Machine Elements, Material

### Academic Titles / Tasks

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2022 - Continues

Research Assistant PhD, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2009 - Continues

### Courses

Failure Analysis, Postgraduate, 2019 - 2020

MACHINE ELEMENTS I, Undergraduate, 2019 - 2020  
TEKNİK RESİM II, Undergraduate, 2017 - 2018  
TASARIM VE KONSTRÜKSİYON ARAŞTIRMALARI, Undergraduate, 2017 - 2018  
MÜHENDİSLİK MEKANİĞİ, Undergraduate, 2017 - 2018  
MAKİNE ELEMANLARI II, Undergraduate, 2017 - 2018

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

- I. **Failure analysis of an axle shaft in an airport ground support vehicle**  
Diler A. A., Gürgen S., Sert A.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART L-JOURNAL OF MATERIALS-DESIGN AND APPLICATIONS, vol.237, no.4, pp.925-940, 2023 (SCI-Expanded)
- II. **Improvement of tool life of a commercial drill bits by cryogenic treatment while machining widmanstatten Ti-6Al-4V**  
SERT A., ÇAKIR F. H.  
SURFACE TOPOGRAPHY-METROLOGY AND PROPERTIES, vol.9, no.4, 2021 (SCI-Expanded)
- III. **An investigation on wear behavior of UHMWPE/carbide composites at elevated temperatures**  
Gürgen S., Sert A., Kuşhan M. C.  
Journal of Applied Polymer Science, vol.138, no.16, 2021 (SCI-Expanded)
- IV. **Anisotropic mechanical and tribological properties of SiAlON matrix composites containing different types of GNPs**  
Baskut S., Sert A., Çelik O. N., Turan S.  
Journal of the European Ceramic Society, vol.41, no.3, pp.1878-1890, 2021 (SCI-Expanded)
- V. **Polishing operation of a steel bar in a shear thickening fluid medium**  
GÜRGEN S., SERT A.  
COMPOSITES PART B-ENGINEERING, vol.175, 2019 (SCI-Expanded)
- VI. **Characterization of the mechanism of cryogenic treatment on the microstructural changes in tungsten carbide cutting tools**  
SERT A., ÇELİK O. N.  
MATERIALS CHARACTERIZATION, vol.150, pp.1-7, 2019 (SCI-Expanded)
- VII. **Effect of cryogenic treatment on the microstructure and the wear behavior of WC-Co end mills for machining of Ti6Al4V titanium alloy**  
Çelik O. N., Sert A., Gaşan H., Ulutan M.  
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.95, pp.2989-2999, 2018 (SCI-Expanded)
- VIII. **Effect of heat treatment on the bending behavior of aluminum alloy tubes**  
SERT A., GÜRGEN S., ÇELİK O. N., KUŞHAN M. C.  
JOURNAL OF MECHANICAL SCIENCE AND TECHNOLOGY, vol.31, no.11, pp.5273-5278, 2017 (SCI-Expanded)
- IX. **Wear behavior of SiC-reinforced surface composite A17075-T651 aluminum alloy produced using friction stir processing**  
SERT A., ÇELİK O. N.  
INDIAN JOURNAL OF ENGINEERING AND MATERIALS SCIENCES, vol.21, no.1, pp.35-43, 2014 (SCI-Expanded)
- X. **Wear behavior of SiC-reinforced surface composite Al7075-T651 aluminum alloy produced using friction stir processing**  
SERT A., ÇELİK Ö.  
Indian Journal of Engineering and Materials Sciences, vol.21, no.1, pp.35-43, 2014 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Laser Surface Texturing and Techniques to Improve the Tribological Properties of Materials**  
Demircan Y., Gemici S., SERT A.  
Open Journal of Nano, vol.6, no.2, pp.41-58, 2021 (Peer-Reviewed Journal)
- II. **AISI M2 Takım Çeliğinin Mikroyapısı ve Mekanik Davranışları Üzerine Derin Kriyojenik İşlemin ve Temperlemenin Etkisi**  
SERT A.  
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.22, no.66, pp.801-811, 2020 (Peer-Reviewed Journal)
- III. **Maintenance Error Detection Procedure and A Case Study of Failure Analysis Locomotive Diesel Engine Bearings**  
ÇAKIR F. H., SERT A., ÇELİK O. N., Dereoglu N.  
JOURNAL OF FAILURE ANALYSIS AND PREVENTION, vol.18, no.2, pp.356-363, 2018 (ESCI)
- IV. **Tribological behaviours of lubricating oils with CNT and Si<sub>3</sub>N<sub>4</sub> nanoparticle additives**  
MEHMET NİYAZI Ç., ÇELİK O. N., SERT A.  
Archives of Materials Science and Engineering, vol.67, no.2, pp.53-59, 2014 (Scopus)
- V. **Tribological behaviours of lubricating oils with CNT and Si<sub>3</sub>N<sub>4</sub>nanoparticle additives**  
Çöl M., ÇELİK Ö., SERT A.  
Archives of Materials Science and Engineering, vol.67, no.2, pp.53-59, 2014 (Scopus)

## Books & Book Chapters

- I. **Development of Shear Thickening Fluid Based Polishing Slurries**  
Sert A., Gürgen S., Kuşhan M. C.  
in: Shear Thickening Fluid Case Studies in Engineering, Selim Gürgen, Editor, Springer Nature, Alabama, pp.1-11, 2023
- II. **Wear behavior of UHMWPE: A case study of gas spring**  
Gürgen S., Sert A., Kuşhan M. C.  
in: Tribology and Surface Engineering for Industrial Applications, Catalin Pruncu, Amit Aherwar, Editor, CRC, New York, New York, pp.1-34, 2021

## Refereed Congress / Symposium Publications in Proceedings

- I. **Mechanical and Tribological Properties of Electroless Nickel Phosphorous Coating on Ti6Al4V Titanium Alloy**  
SERT A., BAŞKUT S.  
2nd Global Conference on Engineering Research, Balıkesir, Turkey, 07 September 2022, pp.425
- II. **STRATEGIES TO IMPROVE TRIBOLOGICAL PROPERTIES OF SILICON CARBIDE**  
BAŞKUT S., SERT A.  
10TH INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESS, İstanbul, Turkey, 23 July 2022, pp.405-409
- III. **EFFECT OF UHMWPE COATING ON THE TRIBOLOGICAL BEHAVIOR OF A LASER TEXTURED STEEL**  
SERT A., GÜRGEN S.  
6th International Conference on Advances in Mechanical Engineering, İstanbul, Turkey, 20 October 2021, pp.1338-1341
- IV. **INFLUENCE OF CRYOGENIC HEAT TREATMENT ON PERFORMANCE OF UNCOATED, ALCRN AND ALTIN CARBIDE CUTTING TOOLS IN MILLING OF TI6AL4V**  
Demircan Y., Gemici S., SERT A., ULUTAN M., GAŞAN H.  
6th International Conference on Advances in Mechanical Engineering, İstanbul, Turkey, 20 October 2021, pp.1541-1553
- V. **Tribological and Finite Element Study on the Elastic Behaviour of a Steel Sphere against a**

## **Deformable Flat Material**

GÜRGEN S., SERT A.

2nd International Conference on Tribology, İstanbul, Turkey, 18 - 20 April 2018, vol.1, pp.237-240

- VI. **Investigation on Tribological Behavior of Laser Surface Treated Ti6Al4V Alloy**  
ÇAVUŞOĞLU N., GÜRGEN S., ÇAKIR F. H., SERT A.  
2nd International Conference on Tribology (TURKEYTRIB'18), İstanbul, Turkey, 18 - 20 April 2018, pp.233-236
- VII. **Study of Carbide Evolution During Heat Treatment of AISI D2 Tool Steel**  
ÇAVUŞOĞLU N., SERT A., ÇELİK O. N., CEYHUN V.  
International Conference on Engineering Technologies (ICENTE'17), Konya, Turkey, 7 - 09 December 2017, pp.129
- VIII. **Investigation of the Mechanism of Cryogenic Treatment on the Microstructural Changes in Tungsten Carbide Tools**  
SERT A., ÇELİK O. N., GAŞAN H.  
3th International Conference on Engineering and Natural Science - ICENS2017, Budapest, Hungary, 3 - 07 May 2017, pp.295
- IX. **Cutting Performance of Different Co Content of Tungsten Carbide Cutting Tools for Titanium Alloy Milling**  
SERT A., ÇELİK O. N.  
3th International Conference on Engineering and Natural Science - ICENS2017, Budapest, Hungary, 3 - 07 May 2017, pp.124
- X. **Characterisation of Tribological Properties of Lubricating Oil with Silicon Nitride Nanoparticle Additives**  
SERT A., SAVACI U., ÇELİK O. N., TURAN S.  
The 18th International Metallurgy Materials Congress, İstanbul, Turkey, 29 September - 01 October 2016, pp.455-458
- XI. **A Study of Quantitative Metallography and X Ray Diffraction Methods for Quantifying Carbide Amount in AISI D2 Tool Steel**  
SERT A., GÜRGEN S., ÇELİK O. N.  
IMMC 2016 18th International Metallurgy & Materials Congress, İstanbul, Turkey, 29 October - 01 November 2016, pp.459-462
- XII. **Characterization of Tribological Properties of Lubricating Oil With Silicon Nitride Nanoparticle Additives**  
SERT A., SAVACI U., ÇELİK O. N., TURAN S.  
IMMC 2016 18th International Metallurgy & Materials Congress, İstanbul, Turkey, 29 October - 01 November 2016, pp.455-458
- XIII. **Tribological Behaviors of Yttria Stabilized Zirconia (YSZ) Nanoparticles as Lubricant Additives**  
SERT A., YILMAZ ÇAKTA D.  
International Nanotechnology Conference, Paris, France, 15 - 17 June 2015, pp.28-30
- XIV. **Tribological Behaviors of Lubricating Oils with CNT and Si3N4 Nanoparticle Additives**  
ÇÖL M. N., ÇELİK O. N., SERT A.  
15th International Materials Symposium, Denizli, Turkey, 15 - 17 October 2014, pp.334-341
- XV. **Microstructural Characterization of Surface Alloyed Al7075-T651 Aluminum Alloy by Friction Stir Processing**  
SERT A., ÇELİK O. N.  
15th International Materials Symposium, Denizli, Turkey, 15 - 17 October 2014, pp.342-347
- XVI. **The Investigation Of Adhesive Wear Properties Of Borided AISI 316 L Stainless Steel**  
ÇELİK O. N., SERT A., YILMAZ A.  
13th International Materials Symposium, Denizli, Turkey, 13 - 15 October 2010, pp.253

MATERIALS RESEARCH EXPRESS, Journal Indexed in SCI-E, July 2018

## **Metrics**

Publication: 33

Citation (WoS): 183

Citation (Scopus): 218

H-Index (WoS): 8

H-Index (Scopus): 9

## **Awards**

Sert A., Outstanding Reviewer Award, Iop Publishing, December 2018