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## Education Information

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2017 - 2020

Undergraduate, Dokuz Eylul University, Faculty Of Engineering, Department Of Metallurgical And Materials Engineering, Turkey 2012 - 2017

## Research Areas

Metallurgical and Materials Engineering, Engineering and Technology

## Academic Titles / Tasks

Research Assistant, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 2019 - Continues

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

- I. **Characterization of structural and mechanical properties of HfNbTaTiZr refractory high entropy alloy after gas nitriding**  
Alphan Y., Kaba M., Motallebzadeh A., Çimenoglu H.  
Intermetallics, vol.169, 2024 (SCI-Expanded)
- II. **Potential plasma facing materials: A case study on CeB6 particulate reinforced W-1Ni matrix composites produced via different sintering techniques**  
Boztemur B., Alkraidı A., Kaba M., Xu Y., Luo L., Çimenoglu H., Öveçoğlu M. L., Ağaoğulları D.  
Journal of Science: Advanced Materials and Devices, vol.9, no.2, 2024 (SCI-Expanded)
- III. **Microstructural effects on impact-sliding wear mechanisms in D2 steels: The roles of matrix hardness and carbide characteristics**  
Kaba M., Filiz H. İ., Cui Z., Baydoğan M., Çimenoglu H., Alpas A.  
Wear, vol.538-539, 2024 (SCI-Expanded)
- IV. **Wear performance of composite dual-layer coated Al-12Si alloy: Effect of Al2Ce reinforcement and micro-arc oxidation**  
Kaba M., Cengiz S., Muhaffel F., Çimenoglu H.  
Materials Chemistry and Physics, vol.312, 2024 (SCI-Expanded)

- V. **Effect of low-temperature nitriding on impact-sliding wear behavior of an austenitic stainless steel at room and sub-zero temperatures**  
Gumuslu T., Kaba M., Atar E., Çimenoglu H.  
TRIBOLOGY INTERNATIONAL, vol.185, pp.108560, 2023 (SCI-Expanded)
- VI. **Elevated Temperature Wear Behavior of AZ91 Magnesium Alloy After Micro-Arc Oxidation in Single and Dual Phase Electrolytes**  
Selvi E., Kaba M., Muhaffel F., Vanlı A. S., Baydoğan M.  
JOURNAL OF TRIBOLOGY, vol.145, no.7, pp.71701, 2023 (SCI-Expanded)
- VII. **Oxidation of a refractory high entropy alloy (RHEA) at moderate temperatures for wear related applications**  
Alphan Y., Kaba M., Motallebzadeh A., Çimenoglu H.  
International Journal of Refractory Metals and Hard Materials, vol.113, 2023 (SCI-Expanded)
- VIII. **First principles calculations and synthesis of multi-phase (HfTiWZr)B<sub>2</sub> high entropy diboride ceramics: Microstructural, mechanical and thermal characterization**  
Kavak S., Bayrak K. G., Mansoor M., Kaba M., Ayas E., Balcı-Çağırın Ö., Derin C. B., Öveçoğlu M. L., Ağaoğulları D.  
Journal of the European Ceramic Society, vol.43, no.3, pp.768-782, 2023 (SCI-Expanded)
- IX. **Surface degradation of nitrated hot work tool steels under repeated impact-sliding contacts: Effect of compound layer**  
Kaba M., Altay M., Akyildiz E., Muhaffel F., Ozkurt S., Atar E., Baydoğan M., Çimenoglu H.  
Wear, vol.498-499, 2022 (SCI-Expanded)
- X. **Thermal oxidation of a porous Ti-23Nb alloy for wear related biomedical applications: Effect of oxidation duration**  
Ibrahim M. K., Kaba M., Muhaffel F., Ağaoğulları D., Çimenoglu H.  
SURFACE & COATINGS TECHNOLOGY, vol.439, 2022 (SCI-Expanded)
- XI. **Spark plasma sintering of molybdenum silicides synthesized from oxide precursors**  
Ovali D., Tarraste M., Kaba M., Ağaoğulları D., Kollo L., Prashanth K. G., Öveçoğlu M. L.  
CERAMICS INTERNATIONAL, vol.47, no.10, pp.13827-13836, 2021 (SCI-Expanded)
- XII. **Influence of alumina and zirconia incorporations on the structure and wear resistance of titania-based MAO coatings**  
Muhaffel F., Kaba M., Cenipura G., Derin B., Kruk A., Atar E., Çimenoglu H.  
Surface and Coatings Technology, vol.377, 2019 (SCI-Expanded)
- XIII. **AlSi5Mg0.3 ALLOY FOR THE MANUFACTURE OF AUTOMOTIVE WHEELS**  
Kaba M., Donmez A., Cukur A., Kurban A. F., Birol Y., Cubuklusu H. E.  
INTERNATIONAL JOURNAL OF METALCASTING, vol.12, no.3, pp.614-624, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Effect of testing temperature on the impact-sliding wear behaviour of a 316L austenitic stainless steel**  
Gumuslu T., Kaba M., Atar E., Çimenoglu H.  
Materials Today: Proceedings, vol.81, pp.81-86, 2023 (Scopus)
- II. **An Investigation on the Longitudinal Cracking of Electric Resistance Welded Steel Pipes**  
Kaba M., Altay M., Çimenoglu H.  
JOURNAL OF FAILURE ANALYSIS AND PREVENTION, vol.20, no.3, pp.657-662, 2020 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **HIGH TEMPERATURE WEAR BEHAVIOR OF HOT-DIP ALUMINIZED INCONEL 718**  
Kavukcu A., Kaba M., Muhaffel F., Baydoğan M.

31st International Conference on Metallurgy and Materials, METAL 2022, Brno, Czech Republic, 18 - 19 May 2022, pp.493-499

**II. Production Of Al<sub>2</sub>Ce Intermetallic Reinforced Al Matrix Composites And Investigation Of Wear Performance**

CENGİZ S., KABA M., ÇETİNER D., ÇİMENOĞLU H.

The Internatinonal Conference on Materials Science, Mechanical and Automotive Engineerings and Technology, 21 - 23 June 2019

**III. Influence of Nitriding on Impact Sliding Wear Behaviour of AISI H13 Tool Steel**

Aydın B., Baş B., Kaba M., Altay M., Muhaffel F., Inan U., Seçkin Ö., Atar E., Çimenoglu H.

UDCS'19 Fourth International Iron and Steel Symposium, Karabük, Turkey, 4 - 06 April 2019, pp.457-460

**IV. Improving Wear Resistance of We43 Magnesium Alloy by Combination of Cold Spray and Micro Arc Oxidation Techniques**

Kaba M., Muhaffel F., Malayoğlu U., Çimenoglu H.

The International Conference on Materials Science, Machine and Automotive Engineerings and Technology, İzmir, Turkey, 10 - 12 April 2018, pp.573

## Supported Projects

Baydoğan M., Balcı E., Muhaffel F., Kaba M., Bayram B., Project Supported by Higher Education Institutions, Eklemeli İmalatla Üretilen Titanyum Esaslı Parçaların Çeşitli Teknolojik ve Mühendislik Uygulamalarına Yönelik Mikroyapı ve Yüzey Özelliklerinin Geliştirilmesi, 2024 - Continues

Çimenoglu H., Kaba M., Muhaffel F., Baydoğan M., Project Supported by Higher Education Institutions, Alüminyum Alaşımlarında Sıfır Altı İşlemin Mikroyapı ve Mekanik Özelliklere Etkisinin İncelenmesi, 2024 - Continues

Muhaffel F., XIAO P., YILMAZ E., PAKSOY A. H., Çimenoglu H., Kaba M., Project Supported by Higher Education Institutions, Zirkonya esaslı seramik kaplamaların aerosol biriktirme tekniği ile üretimi ve karakterizasyonu, 2023 - Continues

Çimenoglu H., Kaba M., Muhaffel F., Baydoğan M., Project Supported by Higher Education Institutions, Mikro-ark Oksidasyon Yöntemi ile Kaplanmış Refrakter Yüksek Entropili Alaşımların Yüksek Sıcaklık Oksidasyon ve Aşınma Davranışlarının İncelenmesi, 2021 - 2024

Muhaffel F., Çimenoglu H., Kaba M., Baydoğan M., Project Supported by Higher Education Institutions, Mikro Ark Oksidasyon ve Hidrotermal İşlemleri ile Biyolojik Uygulamalara Yönelik Olarak Biyomedikal Titanyum Alaşımlarının Yüzey Modifikasyonu, 2021 - 2024

## Metrics

Publication: 24

Citation (WoS): 36

Citation (Scopus): 110

H-Index (WoS): 2

H-Index (Scopus): 5