

Asst. Prof. Gökhan GÜLTEN

Personal Information

Email: gokhangulten@atauni.edu.tr

Web: <https://avesis.atauni.edu.tr/gokhan.gulten>

Address: Mühendislik Fakültesi Makine Mühendisliği Bölümü 25240 Yakutiye/ERZURUM

International Researcher IDs

ScholarID: XkBvkUwAAAAJ

ORCID: 0000-0003-2728-2995

Yoksis Researcher ID: 327587

Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey 2019 - 2024

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, Turkey 2015 - 2019

Undergraduate, Sivas Cumhuriyet University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2010 - 2014

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Vocational Training, TÜBİTAK 2237-A Makalemi Yazıyorum, Bayburt Üniversitesi, 2023

Vocational Training, TÜBİTAK 2237-A- Online- Harmanlanmış Uygulama Eğitimi, Atatürk Üniversitesi, 2023

Vocational Training, TÜBİTAK 2237-A -Online-Makale Yazma Eğitimi, TÜBİTAK, 2023

Vocational Training, TÜBİTAK 2237-B-Proje Yazma Eğitimi, Atatürk Üniversitesi, 2023

Vocational Training, TÜBİTAK 2237-A-Araştırma Becerilerini Geliştirme Eğitimi, Bayburt Üniversitesi, 2022

Vocational Training, Deney Hayvanları Kullanım Sertifikası Eğitim Programı, Atatürk Üniversitesi, 2020

Dissertations

Doctorate, Development of Nb and V added CrYN based functional coatings: Investigation of structural and tribological properties as a function of high temperature, Ataturk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2024

Postgraduate, The synthesis and investigation of tribological properties of bor based CN coatings, Ataturk University, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2018

Research Areas

Construction and Manufacturing, Tribology, Material science and engineering, Mechanical Properties, Corrosion and Corrosion Protection, Biomaterials, Plating, Material Characterization

Academic Titles / Tasks

Assistant Professor, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2024 - Continues
Research Assistant PhD, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2024 - Continues
Research Assistant, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, 2020 - 2024

Courses

MMM401- Makine Laboratuvarı I, Undergraduate, 2024 - 2025
FBMMS527- Malzemelerin Mikroyapısal Karakterizasyonu, Postgraduate, 2024 - 2025
MUH-104 Malzeme Bilimi, Undergraduate, 2023 - 2024
İleri Karakterizasyon Teknikleri: Veri İşleme ve Görselleştirme, Postgraduate, 2024 - 2025

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Adhesion and friction-wear characterization of W-doped hydrogenated diamond-like carbon (a-C:H) coatings**
Efeoğlu İ., Totik Y., Gülten G., Yaylalı B., Yeşilyurt M.
Surface and Coatings Technology, vol.495, 2025 (SCI-Expanded)
- II. **Nb-doped hydrogenated diamond-like carbon coated biodiesel injectors material: Synthesis, structure and properties**
EFEOĞLU İ., Maleque M. A., GÜLTEN G., YEŞİLYURT M., YAYLALI B., TOTİK Y., Kalam M. A., Hassan M. H., Zulkifli N. W.
Diamond and Related Materials, vol.149, 2024 (SCI-Expanded)
- III. **Investigation of hardness, tribological and adhesion properties of TiAlNiVN HEA films heat treated at different temperatures**
Yılmaz A. M., Çiçek H., Duran S., GÜLTEN G., EFEOĞLU İ.
Tribology International, vol.197, 2024 (SCI-Expanded)
- IV. **Corrosion and adhesion properties of MAO-coated LA91 magnesium alloy**
Sukuroglu S., Sukuroglu E. E., TOTİK Y., GÜLTEN G., EFEOĞLU İ., Avci S.
Materials Science and Technology (United Kingdom), vol.40, no.8, pp.616-632, 2024 (SCI-Expanded)
- V. **Effect of Nb and V doped elements on the mechanical and tribological properties of CrYN coatings**
Gülten G., Yaylalı B., Efeoğlu İ., Totik Y., Kelly P., Kulczyk-Malecka J.
Surface and Coatings Technology, vol.477, 2024 (SCI-Expanded)
- VI. **The effect of different annealing temperatures on the mechanical and tribological properties of the Ti₂AlN MAX phase films**
Cakir M., Cicek H., Duran S., Yilmaz A. M., GÜLTEN G., EFEOĞLU İ.
Surface Engineering, vol.40, no.2, pp.157-167, 2024 (SCI-Expanded)
- VII. **Influence of Nb and Ta on the corrosion and mechanical properties of CrYN coatings**
Yaylalı B., Gülten G., Efeoğlu İ., Totik Y., Kelly P., Kulczyk-Malecka J.
Surface and Coatings Technology, vol.476, 2024 (SCI-Expanded)
- VIII. **Influence of sodium pentaborate (B₅H₁₀NaO₁₃) additive in plasma electrolytic oxidation process on WE43 magnesium alloys**
Şenocak T. Ç., Yilmaz T. A., Budak H. F., Gülten G., Yilmaz A. M., Ezirmik K. V., Totik Y.
MATERIALS TODAY COMMUNICATIONS, vol.30, 2022 (SCI-Expanded)
- IX. **The adhesion and tribological properties of c-BN films deposited by high power impulse magnetron sputtering**
Efeoğlu İ., Totik Y., Keleş A., Gulten G., Ersoy K., Durkaya G.
Ceramics International, vol.45, no.3, pp.3000-3006, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **Characterization of Ta/TaN multi-graded thin film coating synthesized by HiPIMS technique**
Polat M. A., Efeoğlu İ., Maleque M. A., Gülten G., Totik Y., Hassan M. H., Zulkifli N. W.
Materials Open Research, vol.2, no.12, pp.1-8, 2023 (Scopus)

Books & Book Chapters

- I. **Annealing Effect on Nb Additive CrYN Thin Films Deposited by Magnetron Sputtering**
Yaylalı B., Gülten G., Yeşilyurt M., Yüksel F., Polat M. A., Efeoğlu İ.
in: Proceeding of 5th International Conference on Advances in Manufacturing and Materials Engineering, Md. Abdul Maleque, Ahmad Zahirani Ahmad Azhar, Norshahida Sarifuddin, Sharifah Imihezri Syed Shaharuddin, Afifah Mohd Ali, Nor Farah Huda Abdul Halim, Editor, Springer Singapore, Singapore, pp.1-667, 2023
- II. **Synthesis and Characterization of Ta/TaN Coatings with CFUBMS-HiPIMS Technology**
Polat M. A., Gülten G., Totik Y., Maleque M. A., Masjuki H. H., Çetin S. Y., Efeoğlu İ.
in: Proceeding of 5th International Conference on Advances in Manufacturing and Materials Engineering, Md. Abdul Maleque, Ahmad Zahirani Ahmad Azhar, Norshahida Sarifuddin, Sharifah Imihezri Syed Shaharuddin, Afifah Mohd Ali, Nor Farah Huda Abdul Halim, Editor, Springer Singapore, Singapore, pp.1-667, 2023
- III. **The Mechanical and Tribological Properties of LaB₆ Thin Films Deposited by Closed-Field Unbalanced Magnetron Sputtering**
Gülten G., Yeşilyurt M., Yaylalı B., Totik Y., Efeoğlu İ.
in: Proceeding of 5th International Conference on Advances in Manufacturing and Materials Engineering, Md. Abdul Maleque, Ahmad Zahirani Ahmad Azhar, Norshahida Sarifuddin, Sharifah Imihezri Syed Shaharuddin, Afifah Mohd Ali, Nor Farah Huda Abdul Halim, Editor, Springer Singapore, Singapore, pp.1-667, 2023
- IV. **Deposition of Nb Doped CrYN Thin Films: Investigation of Structural, Mechanical and Tribological Properties**
Yüksel F., Gülten G., Yaylalı B., Totik Y., Efeoğlu İ.
in: Proceeding of 5th International Conference on Advances in Manufacturing and Materials Engineering, Md. Abdul Maleque, Ahmad Zahirani Ahmad Azhar, Norshahida Sarifuddin, Sharifah Imihezri Syed Shaharuddin, Afifah Mohd Ali, Nor Farah Huda Abdul Halim, Editor, Springer Singapore, Singapore, pp.1-667, 2023

Refereed Congress / Symposium Publications in Proceedings

- I. **Adhesion and Friction-wear Characterization of Wdoped Hydrogenated Diamond-like Carbon (a-C:H) Coatings**
Efeoğlu İ., Totik Y., Gülten G., Yaylalı B., Yeşilyurt M., Günay R., Kara G., Altıntaş B. B.
50th International Conference on Metallurgical Coatings and Thin Films (ICMCTF 2024), California, United States Of America, 19 May 2023 - 24 May 2024, pp.40
- II. **Wear and Corrosion Characterization and Parametric Optimization of Nb-doped Hydrogenated Diamond-like Carbon (a-C:H) Coatings**
Efeoğlu İ., Totik Y., Gülten G., Yaylalı B., Yeşilyurt M., Günay R., Kara G., Altıntaş B. B.
50th International Conference on Metallurgical Coatings and Thin Films (ICMCTF 2024), California, United States Of America, 19 - 24 May 2024, pp.99
- III. **Effect Of Different Annealing Temperatures On Mechanical, Tribological, And Adhesion Properties Of TiAlN-(N) High Entropy Alloy Films**
Yılmaz A. M., Çiçek H., Duran S., Gülten G., Efeoğlu İ.
1. BİLSEL INTERNATIONAL KORYKOS SCIENTIFIC RESEARCHES AND INNOVATION CONGRESS, Mersin, Turkey, 27 - 28 January 2024, vol.1, no.1, pp.1
- IV. **Production of MAX Phase Ti₂AlN Coatings and Investigation of Structural and Tribological**

Properties

Çakır M., Çiçek H., Duran S., Yılmaz A. M., Gülten G., Efeoğlu İ.

1. BILSEL INTERNATIONAL AHLAT SCIENTIFIC RESEARCHES CONGRESS, Bitlis, Turkey, 15 - 16 August 2023, pp.1-5

- V. **Influence of Nb and Ta on the corrosion and mechanical properties of CrYN coatings**
Yaylah B., Gülten G., Efeoğlu İ., Totik Y., Kelly P., Kulczyk-Malecka J.
49th International Conference on Metallurgical Coatings and Thin Films-ICMCTF, California, United States Of America, 21 - 26 May 2023, pp.1-15
- VI. **Effect of Nb and V Doped Elements on the Mechanical and Tribological Properties of CrYN Coatings**
Gülten G., Yaylah B., Efeoğlu İ., Totik Y., Kelly P., Kulczyk-Malecka J.
49th International Conference on Metallurgical Coatings and Thin Films-ICMCTF, California, United States Of America, 21 - 26 May 2023, pp.1-15
- VII. **Annealing Effect on Nb Additive CrYN Thin Films Deposited by Magnetron Sputtering**
YAYLALI B., GÜLTEN G., YEŞİLYURT M., Yüksel F., POLAT M., EFEOĞLU İ.
5th International Conference on Advances in Manufacturing and Materials Engineering, ICAMME 2022, Kuala-Lumpur, Malaysia, 9 - 10 August 2022, pp.259-265
- VIII. **The Mechanical and Tribological Properties of LaB₆ Thin Films Deposited by Closed-Field Unbalanced Magnetron Sputtering**
GÜLTEN G., YEŞİLYURT M., YAYLALI B., TOTİK Y., EFEOĞLU İ.
5th International Conference on Advances in Manufacturing and Materials Engineering, ICAMME 2022, Kuala-Lumpur, Malaysia, 9 - 10 August 2022, pp.245-250
- IX. **Deposition of Nb Doped CrYN Thin Films: Investigation of Structural, Mechanical and Tribological Properties**
Yüksel F., GÜLTEN G., YAYLALI B., TOTİK Y., EFEOĞLU İ.
5th International Conference on Advances in Manufacturing and Materials Engineering, ICAMME 2022, Kuala-Lumpur, Malaysia, 9 - 10 August 2022, pp.251-257
- X. **Synthesis and Characterization of Ta/TaN Coatings with CFUBMS-HiPIMS Technology**
Polat M. A., GÜLTEN G., TOTİK Y., Maleque M. A., Masjuki H. H., Çetin S. Y., EFEOĞLU İ.
5th International Conference on Advances in Manufacturing and Materials Engineering, ICAMME 2022, Kuala-Lumpur, Malaysia, 9 - 10 August 2022, pp.273-279
- XI. **Synthesis of Ta/TaN Coatings with CFUBMS-HiPIMS Technology and Investigation of Mechanical-Tribological Properties**
Polat M. A., Gülten G., Maleque M. A., Masjuki H., Çetin S., Efeoğlu İ.
5th International Conference on Advances in Manufacturing and Materials Engineering, Kuala-Lumpur, Malaysia, 9 - 10 August 2022, pp.1-6
- XII. **HIGH TEMPERATURE WEAR BEHAVIOUR OF TiCrNb-hBN COATINGS**
Sert Y., Küçükömeroğlu T., Kahramanzade H., Gülten G.
International Conference on Global Practice of Multidisciplinary Scientific Studies, Tbilisi, Georgia, 24 - 26 June 2022, pp.324-331
- XIII. **The Mechanical and Corrosion Properties of TaN Thin Films Coated on Ti6Al4V Using Pulsed-dc Magnetron Sputtering**
Gülten G., Yılmaz T. A., Totik Y., Efeoğlu İ.
International Online Conferences on Engineering and Natural Sciences IOCENS'21, Gümüşhane, Turkey, 05 July 2021
- XIV. **HARDNESS and ADHESION PROPERTIES of PVD- (Ti, Cr, Nb)-hBN**
SERT Y., YEŞİLYURT M., GÜNAYDIN O., KÜÇÜKÖMEROĞLU T., GÜLTEN G.
International Conference on Material Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'21), Nevşehir, Turkey, 31 May 2021
- XV. **Investigation of mechanical and tribological properties of BCN thin films**
GÜLTEN G., EFEOĞLU İ., TOTİK Y., KELEŞ A., ERSOY K., DURKAYA G.
Science and Applications of Thin Films, Conference Exhibition (SATF 2018), 17 - 21 September 2018

- XVI. **The Adhesion Properties of c-BN Films Coated Using HiPIMS and Pulsed-dc Magnetron Sputtering**
EFEÖĐLU İ., TOTİK Y., KELEŞ A., GÜLTEN G., ERSOY K., DURKAYA G.
SATF, 17 - 21 September 2018

Expert Reports

- I. **T.C. ERZURUM 1. ASLİYE HUKUK MAHKEMESİ'NE BİLİRKİŞİ RAPORU**
Gülten G.
Atatürk Üniversitesi, pp.2, Erzurum, 2020

Supported Projects

- EFEÖĐLU İ., KARA G., YEŞİLYURT M., GÜLTEN G., AVCİ S., YAYLALI B., GÜNAY R., TOTİK Y., ALTINTAŞ B. B., Project Supported by Higher Education Institutions, Turbo Jet Uçak Motorun Sızdırmazlık Elemanları için Yüksek Sıcaklık Fonksiyonel Kaplamaların Geliştirilmesi, 2022 - Continues
- EFEÖĐLU İ., TOTİK Y., GÜLTEN G., YAYLALI B., KULCZYK-MALECKA J., KELLY P., KELLY P., Project Supported by Higher Education Institutions, Agresif Zorlu Ortamlar için Seramik Kaplamaların Geliştirilmesi, 2022 - 2024
- Efeöđlu İ., Totik Y., Gülten G., Maleque A., Kalam M. A., Hassan M. H., Zulkıflı N. W. B. M., YAYLALI B., Project Supported by Higher Education Institutions, Increasing the Performance and Service Life of a Diesel Engine Fuel Injector by Surface Modification, 2022 - 2024
- ÖZAKIN A. N., EFEÖĐLU İ., ÖNER İ. V., YILDIRIM O., ACAR M. T., TOPRAK B. İ., HÜLAGÜ B., GÜLTEN G., SOLMAZ İ., KOVACI H., et al., Project Supported by Higher Education Institutions, Makine Mühendisliđi Bölümü Bakım Onarım Projesi, 2021 - 2023
- Efeöđlu İ., Totik Y., Project Supported by Public Organizations in Other Countries, Development of coatings for hostile environments, 2020 - 2022
- Efeöđlu İ., Totik Y., TUBITAK Project, c-BN Esaslı BN İnce Film Kaplama Geliştirilmesi Yapısal Mekanik Tribolojik Özelliklerin Araştırılması, 2016 - 2018

Scientific Refereeing

JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, Journal Indexed in SCI-E, May 2021

Scientific Research / Working Group Memberships

Functional Surface Technologies R&D Group, Ataturk University, Turkey, <https://avesis.atauni.edu.tr/arastirma-grubu/fstech>, 2015 - Continues

Metrics

Publication: 32
Citation (WoS): 8
Citation (Scopus): 21
H-Index (WoS): 2
H-Index (Scopus): 2

Congress and Symposium Activities

1. BİLSEL INTERNATIONAL KORYKOS SCIENTIFIC RESEARCHES AND INNOVATION CONGRESS, Attendee, Mersin, Turkey, 2024

1. BİLSEL INTERNATIONAL AHLAT SCIENTIFIC RESEARCHES CONGRESS, Attendee, Bitlis, Turkey, 2023

49th International Conference on Metallurgical Coatings and Thin Films, Attendee, California, United States Of America, 2023

49th International Conference on Metallurgical Coatings and Thin Films, Attendee, California, United States Of America, 2023

5th International Conference on Advances in Manufacturing and Materials Engineering (ICAMME) 2022, Attendee, Kuala-Lumpur, Malaysia, 2022

International Conference on Global Practice of Multidisciplinary Scientific Studies, Attendee, Tbilisi, Georgia, 2022

International Online Conferences on Engineering and Natural Sciences, Attendee, Gümüşhane, Turkey, 2021

International Conference on Material Science, Mechanical and Automotive Engineerings and Technology, Attendee, Nevşehir, Turkey, 2021

Science and Applications of Thin Films, Conference & Exhibition, Attendee, İzmir, Turkey, 2018

Scholarships

TÜBİTAK 2211-A Genel Doktora Bursu, TUBITAK, 2019 - Continues

TÜBİTAK 2237-B, TUBITAK, 2023 - 2023

TÜBİTAK 2237-A, TUBITAK, 2022 - 2022

YÖK 100/2000 Doktora Bursu, YOK, 2019 - 2020

Tübitak 1003, TUBITAK, 2017 - 2018