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Personal Information

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Education

Undergraduate, Kastamonu University, Turkey 2019 - 2020
Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 2013 - 2017
Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 2007 - 2007
Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Turkey 2002 - 2006

Foreign Languages

English

Dissertations

Doctorate, Kesme parametrelerinin ses üzerindeki etkilerinin araştırılması, Gazi University, Fen Bilimleri Enstitüsü, 2017
Postgraduate, Mayın tarama ve çıkartma makinası tasarımı, Gazi University, Fen Bilimleri Enstitüsü, 2013

Academic Positions

Manisa Celal Bayar University, 2020 - Present
Lecturer, Cankiri Karatekin University, 2012 - 2020

Academic and Administrative Experience

Manisa Celal Bayar University, 2021 - 2024
Manisa Celal Bayar University, 2020 - 2023

Courses

Undergraduate
Makine Elemanları, Undergraduate, 2021-2022
Bilgisayar Destekli Teknik Resim, Undergraduate, 2021-2022, 2020-2021
Mühendislikte Arge Projesi Hazırlama Teknikleri I, Undergraduate, 2021-2022, 2020-2021
Mukavemet, Undergraduate, 2020-2021

Statik, Undergraduate, 2020-2021

Associate Degree

MMK 2109-İleri İmalat Yöntemleri, Associate Degree, 2022-2023, 2021-2022
MMK 2113-Araştırma Yöntem ve Teknikleri, Associate Degree, 2022-2023, 2021-2022
EKT 2209-İleri İmalat Teknolojisi 2, Associate Degree, 2022-2023
EKT 2109-Araştırma Yöntem ve Teknikleri, Associate Degree, 2022-2023
EKT 2101-Bilgisayar Destekli Üretim 2, Associate Degree, 2022-2023
MMK 2107-Cnc Freze Teknolojisi, Associate Degree, 2022-2023
EKT 1111-Bilgisayar Destekli Çizim 1, Associate Degree, 2022-2023
EKT 1203-İleri İmalat Teknolojisi 1, Associate Degree, 2021-2022
EKT 1112-Bilgisayar Destekli Üretim 1, Associate Degree, 2021-2022
MYO 2002-İşletmede Mesleki Eğitim, Associate Degree, 2021-2022
EKT 1104-Saç Metal Kalıpçılık Tekniği, Associate Degree, 2021-2022
EKT 1110-Mukavemet, Associate Degree, 2021-2022
EKT 1107-İmalat İşlemleri, Associate Degree, 2021-2022
EKT 1113-Meslek Etiği, Associate Degree, 2021-2022
MMK 2101-Kaynak Teknolojisi, Associate Degree, 2021-2022
MYO 2000-İş Yeri Uygulama Eğitimi, Associate Degree, 2020-2021
MRK 1104-Bilgisayar Destekli Çizim, Associate Degree, 2020-2021
MMK 2213-İş Kalıpları, Associate Degree, 2020-2021
MMK 1110-CNC Torna Teknolojisi, Associate Degree, 2020-2021
ITP 1105-Teknik Resim, Associate Degree, 2020-2021

Undergraduate Minor

Sonlu Elemanlar Metodu, Undergraduate Minor, 2022-2023

Articles

I. **Sustainability-oriented analysis and modeling of the effects of hardness and minimum quantity lubrication on power consumption, vibration, and surface roughness in turning AISI S1 steel**
YAVUZ M., ŞAHİNOĞLU A.
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2026 (SCI-Expanded, Scopus)

II. **Modeling and optimization of hard turning: predictive analysis of surface roughness and cutting forces in AISI 52100 steel using machine learning**
Kumar R., Rafighi M., ÖZDEMİR M., ŞAHİNOĞLU A., Kulshreshta A., Singh J., Singh S., Prakash C., Bhowmik A.
International Journal on Interactive Design and Manufacturing, vol.19, no.8, pp.5749-5778, 2025 (ESCI, Scopus)

III. **Investigation of the effects of MQL and material hardness on energy consumption, vibration, and surface roughness in hard turning of AISI 52100 steel for a sustainable manufacturing**
ŞAHİNOĞLU A.
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, vol.239, no.1, pp.308-320, 2025 (SCI-Expanded, Scopus)

IV. **Investigation of energy consumption and surface roughness in hot work tool steel (DIN 1.2367) and cold work tool steel (DIN 1.2550)**
ŞAHİNOĞLU A.
Scientia Iranica, vol.32, no.2, 2025 (SCI-Expanded, Scopus)

V. **Investigate energy efficiency, cutting force and surface roughness in hard turning of AISI S1 Steel for sustainable manufacturing**
ŞAHİNOĞLU A.
Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, vol.238, no.7, pp.2772-2781, 2024 (SCI-Expanded, Scopus)

VI. **Investigation of machinability properties of AISI H11 tool steel for sustainable manufacturing**
ŞAHİNOĞLU A.
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, vol.236, no.6, pp.2717-2728, 2022 (SCI-Expanded, Scopus)

VII. **EXPERIMENTAL ASSESSMENT and TOPSIS OPTIMIZATION of CUTTING FORCE, SURFACE ROUGHNESS, and SOUND INTENSITY in HARD TURNING of AISI 52100 STEEL**
Rafighi M., ÖZDEMİR M., ŞAHİNOĞLU A., Kumar R., Das S. R.
Surface Review and Letters, vol.29, no.11, 2022 (SCI-Expanded, Scopus)

VIII. **An investigation on cutting sound effect on power consumption and surface roughness in CBN tool-assisted hard turning**
ŞAHİNOĞLU A., Rafighi M., Kumar R.
Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, vol.236, no.3, pp.1096-1108, 2022 (SCI-Expanded, Scopus)

IX. **Analysis and optimisation of the cutting parameters based on machinability factors in turning AISI 4140 steel**
ÖZDEMİR M., ŞAHİNOĞLU A., Rafighi M., YILMAZ V.
Canadian Metallurgical Quarterly, vol.61, no.4, pp.407-417, 2022 (SCI-Expanded, Scopus)

X. **Machinability of hardened AISI S1 cold work tool steel using cubic boron nitride**
ŞAHİNOĞLU A., Rafighi M.
Scientia Iranica, vol.28, no.5 B, pp.2655-2670, 2021 (SCI-Expanded, Scopus)

XI. **Investigation of tool wear, surface roughness, sound intensity, and power consumption during hard turning of AISI 4140 steel using multilayer-coated carbide inserts**
ŞAHİNOĞLU A., Rafighi M.
Journal of Engineering Research (Kuwait), vol.9, no.4 B, pp.377-395, 2021 (SCI-Expanded, Scopus)

XII. **An investigation of cutting parameters effect on sound level, surface roughness, and power consumption during machining of hardened AISI 4140**
ŞAHİNOĞLU A., Ulas E.
Mechanics and Industry, vol.21, no.5, 2020 (SCI-Expanded, Scopus)

Books

I. **Investigation of the Relationship between Temperature, Sound Intensity and Surface Roughness Related to Tool Wear During Turning of Hardened AISI 4340 Material**
ŞAHİNOĞLU A., RAFİGHİ M.
in: Energy and Environmental Studies for the Near Future, Afşin GÜNGÖR,Bekir Can LÜTFÜOĞLU, Azim Doğuş TUNCER, Onur KARAMAN, Editor, Akademisyen Kitapevi A.Ş., Ankara, pp.65-77, 2020

Papers Presented at Peer-Reviewed Scientific Conferences

I. **INVESTIGATION OF AISI 52100 MACHINABILITY IN DIFFERENT HARDNESSES AND CUTTING CONDITIONS**
ŞAHİNOĞLU A.
EGE 2TH INTERNATIONAL CONFERENCE ON SCIENCES DECEMBER 26-30, 2024, 26 - 30 December 2024, (Full Text)

II. **INVESTIGATION OF RELATIONSHIP BETWEEN POWER CONSUMPTION AND VIBRATION IN HARDENED AISI S1 STEEL UNDER DIFFERENT CUTTING CONDITIONS**
ŞAHİNOĞLU A.
INTERNATIONAL 6 th BURSA SCIENTIFIC RESEARCHES CONGRESS, Bursa, Turkey, 24 - 26 December 2024, (Full Text)

III. **Modeling of thermoelectric generator and photovoltaic panel hybrid system**
ÜSTÜNER M. A., GÖLEN O. E., ŞAHİNOĞLU A., MAMUR H.
International Conferences on Science and Technology Engineering Science and Technology, Durres, Albania, 4 - 06 October 2024, pp.109-113, (Full Text)

IV. **DİK FREZELEMEDE DEĞİŞEN KESME PARAMETRELERİ İLE OLUŞAN SES VE YÜZEY PÜRÜZLÜLÜK İLİŞKİSİ**
ERBAŞ M., ŞAHİNOĞLU A., GÜLLÜ A.
INTERNATIONAL CONGRESS ON ENGINEERING SCIENCES AND MULTIDISCIPLINARY APPROACHES, Turkey, 23 - 24 February 2021, (Full Text)

V. **YATAY FREZE TEZGÂHINDA YÜKSEK TALAŞ DERİNLİKLERİNDE KESME PARAMETRELERİNİN YÜZEY PÜRÜZLÜLÜK DEĞERİ ve GÜÇ TÜKETİMİ ÜZERİNDEKİ ETKİLERİNİN İNCELENMESİ**
ŞAHİNOĞLU A., ERBAŞ M., GÜLLÜ A.
INTERNATIONAL CONGRESS ON ENGINEERING SCIENCES AND MULTIDISCIPLINARY APPROACHES, Turkey, 23 - 24 February 2021, (Full Text)

VI. **Detailed analysis of machine current during hard turning of DIN 1.2367 steel using CBN**
Eren N., HAYAT F., ŞAHİNOĞLU A., GÜNAY M.
6TH INTERNATIONAL CONFERENCE ONENGINEERING AND NATURAL SCIENCES, Belgrade, Serbia, 21 - 25 October 2020, pp.20-25, (Full Text)

VII. **Investigation of the Effect of Different Cutting Parameters on Current and Roughness During Turning of AISI 1040 Material**
ŞAHİNOĞLU A., ÖZDEMİR M.
IV. International Congress on New Trends in Science, Engineering and Technology (ICONTRENDS), St.Petersburg, Russia, 7 - 09 July 2020, pp.258-263, (Full Text)

VIII. **INVESTIGATION OF PROCESSABILITY CHARACTERISTICS OF AISI 4140 MATERIAL WITH CRYOGENIC PROCESS**
ŞAHİNOĞLU A., ÖZDEMİR M.
2nd INTERNATIONAL EUROPEAN CONFERENCE ON INTERDISCIPLINARY SCIENTIFIC RESEARCHES, 4 - 05 July 2020, (Full Text)

IX. **Investigation of the Effects of Tool Wear on Temperature and Surface Roughness Value in the DIN 1.2343 Material Machining**
ŞAHİNOĞLU A.
Cumhuriyet Zirvesi 2. Uluslararası Uygulamalı Bilimler Kongresi, 28 - 30 October 2019, (Full Text)

X. **Investigation of The Effects the Cutting Parameters and Coolant on theSurface Roughness Value in the Machining of AISI 4340 with CBN Tools**
ŞAHİNOĞLU A., AKKAŞ M., DÖNERTAŞ M. A.
Cumhuriyet Zirvesi 2. Uluslararası Uygulamalı Bilimler Kongresi, Ankara, Turkey, 28 - 30 October 2019, pp.49-57, (Full Text)

XI. **Investigation of the Relationship Between Power Consumptıon and Surface Roughness During Hard Turning of DIN 1.2343 steel**
ŞAHİNOĞLU A., DÖNERTAŞ M. A., ÇİFTÇİ İ., YILDIZ G.
10th International Congresson Machining, Antalya, Turkey, 7 - 09 November 2019, pp.128-133, (Full Text)

XII. **Investigatıon of the Effects Cutting Parameters and Tool Radius on Current, Sound Level and Surface Roughness During Hard Turning of Material of DIN 1.2367**
ŞAHİNOĞLU A.
4. International Conference on Material Science and Technology in Kızılcahamam / Ankara, 18 - 20 October 2019, (Full Text)

XIII. **Investigation of the Effects of Cutting Parameters on Surface Roughness, Current and Sound Level in AISI 4140 Material of Applied with Cryogenic Processing**
ŞAHİNOĞLU A.
4. International Conference on Material Science and Technology in Kızılcahamam / Ankara, 18 - 20 October 2019, (Full Text)

XIV. **Investigation of Cooling Conditions with Cutting Parameters in Turning of Hardened DIN 1.2343**
ŞAHİNOĞLU A.
Ankara International Congress on Scientific Researches, 4 - 06 October 2019, (Full Text)

XV. **Investigation of the Relationship between Temperature, Sound Intensity and Surface Roughness due to Tool Wear during Turning of Hardened AISI 4140 Material**
ŞAHİNOĞLU A.
Ankara International Congress on Scientific Researches, 4 - 06 October 2019, (Full Text)

XVI. **Hasta Yıkama Yataklarında Yenilik**
ÖZARAS G., ŞAHİNOĞLU A., UZUN O.
1st International Congress on Nursing and Innovation, 14 - 15 December 2018, (Full Text)

XVII. **Inteligent Production Machine**
ŞAHİNOĞLU A., GÜRBÜZ R., GÜLLÜ A., KARHAN M.
World Academy of Science, Engineering and Technology International Journal of Materials and Metallurgical Engineering, Venedik, Italy, 13 - 14 August 2015, vol.2, pp.1101-1108, (Full Text)

XVIII. **Kumlama İşleminde Paslanmış Bölgelerin K-means Yöntemini Kullanarak Renk Tabanlı Bölütlenmesi**
KARHAN M., ŞAHİNOĞLU A.
Çankaya Üniversitesi 8. Mühendislik ve Teknoloji Sempozyumu, Turkey, 15 - 16 July 2015, (Full Text)

XIX. **Android Uygulamalı 3 Boyutlu Robot Kol Tasarımı**
ISSI F., TEKE M., KARHAN M., ÖZTÜRK M., ŞAHİNOĞLU A., GÖKÇE H., KUTAR İ., GÖREL G.
MKT 2014 Proje Tabanlı Mekatronik Eğitimi Çalıştayı, Sinop, Turkey, 22 - 24 May 2014, (Full Text)

XX. **PLC Kontrollü Kaynak Makinası**
DÖNERTAŞ M. A., ÇAM İ., ŞAHİNOĞLU A., SÜLEK M.
Proje Tabanlı Mekatronik Eğitimi Çalıştayı (MKT 2014), Turkey, 22 - 24 May 2014, (Full Text)

XXI. **Kumlama Boyama Makinası**
DÖNERTAŞ M. A., ŞAHİNOĞLU A., ÇAM İ., GÖKÇE H., KARA F.
Proje Tabanlı Mekatronik Eğitimi Çalıştayı (MKT 2014), Turkey, 22 - 24 May 2014, (Full Text)

Funded Projects

MAMUR H., ŞAHİNOĞLU A., ÜSTÜNER M. A., Project Supported by Higher Education Institutions, Elektrik şebekesinden uzak kırsal alanlar için maksimum güç noktası izleyicili hibrit termoelektrik ve solar enerjili batarya şarj sistemi, 2023 - 2025

CANBULA D., FİAT VAROL S., ŞAHİNOĞLU A., ŞAHİN C. A., TEKE O., KANAT Y., Project Supported by Higher Education Institutions, Güneş-Hidrojen Hibrit Enerji Sistemlerinin Verimlilik Analizleri ve Mikro Rüzgar Türbinlerinin Farklı Yükler Altında Çalıştırarak Oluşan Hız, Titreşim ve Ses Analizlerinin Yapılması, 2020 - 2021

ŞAHİNOĞLU A., Project Supported by Higher Education Institutions, AISI 52100 Çeliğin İşlenmesinde Akım, Ses Şiddeti, Yüzey Pürüzlülüğü Ve Sıcaklığın Etkisinin İncelenmesi, 2019 - 2020

ŞAHİNOĞLU A., ALGUR H., UZUN O., Project Supported by Higher Education Institutions, Üniversitede Öğrenim Gören Bayan Öğrencilerin Barındıkları Yerlerdeki İhtiyaçlarını Karşılayacak Optimum Elbise Dolabı Tasarımının Geliştirilmesi, 2015 - 2016

Patent

ŞAHİNOĞLU A., Mayın tespit ve Tahliye Aracı, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, Standard Registration, 2019

ŞAHİNOĞLU A., Toplu Kullanıma Yönelik İç Mekan Tuvalet Temizliği İçin Otomatik Kontrollü Temizlik Robotu, Patent, CHAPTER A Human Needs, Standard Registration, 2019

ŞAHİNOĞLU A., Akıllı üretim Tezgahı ve Bu Tezgahın Kontrolü, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, Standard Registration, 2018

ŞAHİNOĞLU A., Hasta Yıkama Yataklarında Yenilik, Patent, CHAPTER A Human Needs, Standard Registration, 2018
ŞAHİNOĞLU A., YILMAZ C., PLC Kontrollü Yol Yapım Makinası, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, Standard Registration, 2018

Metrics

Publication: 34
Citation (WoS): 126
Citation (Scopus): 173
H-Index (WoS): 6
H-Index (Scopus): 8