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Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: F-9920-2016

ScopusID: 36343682200

Yoksis Researcher ID: 185687

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), Turkey 2003 - 2008

Dissertations

Doctorate, Elektro erozyon ile iletken olmayan seramiklerin işlenmesi için yöntem geliştirilmesi, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Dr), 2008

Postgraduate, Sol-jel yöntemi ile elde edilen ZnO tozlar ile seramik üretimi, Gebze Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Malzeme Bilimi Ve Mühendisliği (YI) (Tezli), 2003

Research Areas

Machine Elements, Casting Methods, Non-traditional manufacturing methods, Welding Methods, Material, Plastic Forming Methods, Machining Methods, Engineering and Technology

Academic Titles / Tasks

Professor, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2023 - Continues

Associate Professor, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2017 - 2023

Assistant Professor, Gazi University, Mühendislik Fakültesi, Makina Mühendisliği, 2013 - 2017

Research Assistant, Gebze Yüksek Teknoloji Enstitüsü, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği Bölümü, 2000 - 2002

Courses

MAKİNA ELEMANLARI I, Undergraduate, 2017 - 2018, 2016 - 2017

MALZEME BİLGİSİ, Undergraduate, 2017 - 2018

MAKİNA MÜHENDİSLİĞİ UYGULAMALARI I, Undergraduate, 2017 - 2018, 2016 - 2017

ALIŞILMAMIŞ İMALAT YÖNTEMLERİ, Postgraduate, 2017 - 2018

İMAL USULLERİ, Undergraduate, 2017 - 2018, 2016 - 2017

MAKİNA MÜHENDİSLİĞİ UYGULAMALARI II, Undergraduate, 2017 - 2018, 2016 - 2017

Advising Theses

Küçüktürk G., Powder bed selective laser melting/sintering of high-technical ceramic materials, Doctorate, M.EID(Student), 2022

KÜÇÜKTÜRK G., Investigations Of Weldability Of Aluminum 6061 T6 Conditions Material With Electron Beam Welding Process, Postgraduate, M.ATKAYA(Student), 2021

KÜÇÜKTÜRK G., Heat Transfer Modelling And Simulations Of Melt Pool Geometry For Electron Beam Melting Method With Ti-6al-4v, Postgraduate, H.AKILLILAR(Student), 2020

KÜÇÜKTÜRK G., Experimental Investigation Of Production Of B4c Reinforced Al2014 Matrix Composites With Vacuum Infiltration Method And Machinability Of Composites By Using Electro Discharge Machining Method, Postgraduate, O.Farid(Student), 2019

KÜÇÜKTÜRK G., Experimental Investigation Of Machining Characteristics For Al2014 Alloy Reinforced With Tıb2 Composites In Powder-Mixed Edm, Postgraduate, J.Joudi(Student), 2019

KÜÇÜKTÜRK G., Çift fazlı sac malzemelerin V-bükme işlemini kullanarak geri esneme davranışlarının incelenmesi, Postgraduate, M.TAHTA(Student), 2019

KÜÇÜKTÜRK G., Experimental Investigation Of Incremental Sheet Forming Method Via Hydraulic Fluid, Postgraduate, H.Volkan(Student), 2019

KÜÇÜKTÜRK G., Experimental Investigation Of Machining Parameter Effects On Aa7075 Alloy Reinforced With Sic, B4c By Powder-Mixed Electrical Discharge Machining, Postgraduate, G.Keskin(Student), 2019

KÜÇÜKTÜRK G., Investigation Of The Effect Of Work Piece Material Properties On The Surface Integrity And Machining In Deep Hole Drilling By Electro Discharge Machining, Postgraduate, A.KHABBAZ(Student), 2017

KÜÇÜKTÜRK G., The Study Of Ti6al4v Alloy Processing With Nonconventional Manufacturing And Investigation Of Surface Integrity After Shot Peening, Postgraduate, D.Kaya(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Enhancing powder bed fusion of alumina ceramic material: a comprehensive study from powder tailoring to mechanical performance evaluation**
Abdelmoula M., KÜÇÜKTÜRK G., Juste E., Petit F.
International Journal of Advanced Manufacturing Technology, vol.131, no.3-4, pp.1745-1767, 2024 (SCI-Expanded)
- II. **Direct selective laser sintering of silicon carbide: Realizing the full potential through process parameter optimization**
Abdelmoula M., KÜÇÜKTÜRK G., Grossin D., Zarazaga A. M., Maury F., Ferrato M.
Ceramics International, vol.49, no.20, pp.32426-32439, 2023 (SCI-Expanded)
- III. **Experimental and Analytical Investigation of the Re-Melting Effect in the Manufacturing of 316L by Direct Energy Deposition (DED) Method**
Kahya H., GÜRÜN H., KÜÇÜKTÜRK G.
Metals, vol.13, no.6, 2023 (SCI-Expanded)
- IV. **A Novel Approach for Powder Bed Fusion of Ceramics Using Two Laser Systems**
Kaya D., Abdelmoula M., Kucukturk G., Grossin D., Stamboulis A.
MATERIALS, vol.16, no.6, 2023 (SCI-Expanded)
- V. **Investigation of the effect of lubricant properties of carbon nanomaterial in Cu/MWCNT composites on wear**
Pul M., Yilmazel R., Erten M. Y., KÜÇÜKTÜRK G., KAYA D., Salunkhe S., ZÜMRÜT Y., Cep R., Nasr E. S. A.
FRONTIERS IN MATERIALS, vol.10, 2023 (SCI-Expanded)

- VI. **Selection of Constitutive Material Model for the Finite Element Simulation of Pressure-Assisted Single-Point Incremental Forming**
Hassan A. A., KÜÇÜKTÜRK G., Yazgin H. V., GÜRÜN H., KAYA D.
MACHINES, vol.10, no.10, 2022 (SCI-Expanded)
- VII. **Machinability of B4C-reinforced Al2014 metal matrix composites in electric discharge machining**
Ahmadinia O. F., KÜÇÜKTÜRK G., Sucularli F., GÜRÜN H.
REVISTA DE METALURGIA, vol.58, no.4, 2022 (SCI-Expanded)
- VIII. **Improvement of incremental sheet metal forming with the help of a pressurised fluid system**
KÜÇÜKTÜRK G., Yazgin H. V.
MATERIALS TESTING, vol.64, no.8, pp.1214-1222, 2022 (SCI-Expanded)
- IX. **Multi-Layer Simulation of the Powder Bed Selective Laser Processing of Alumina for Residual Stress and Distortion Evaluation**
Abdelmoula M., KÜÇÜKTÜRK G.
MATERIALS, vol.15, no.10, 2022 (SCI-Expanded)
- X. **Numerical and experimental study for electron beam welding process of Al6061-T6 material**
KÜÇÜKTÜRK G., Atkaya M.
MATERIALS RESEARCH EXPRESS, vol.9, no.4, 2022 (SCI-Expanded)
- XI. **Powder Bed Selective Laser Processing of Alumina: Scanning Strategies Investigation**
Abdelmoula M., KÜÇÜKTÜRK G., Juste E., Petit F.
APPLIED SCIENCES-BASEL, vol.12, no.2, 2022 (SCI-Expanded)
- XII. **Scanning Strategy Investigation for Direct Powder Bed Selective Laser Processing of Silicon Carbide Ceramic**
Abdelmoula M., Zarazaga A. M., Kucukturk G., Maury F., Grossin D., Ferrato M.
Applied Sciences (Switzerland), vol.12, no.2, 2022 (SCI-Expanded)
- XIII. **EVALUATION OF THE EFFECTS OF LOCAL HEATING ON SPRINGBACK BEHAVIOUR FOR AHSS DOCOL 1400 SHEET METAL**
KÜÇÜKTÜRK G., Tahta M., GÜRÜN H., KARAAĞAÇ İ.
TRANSACTIONS OF FAMENA, vol.46, no.3, pp.51-62, 2022 (SCI-Expanded)
- XIV. **INVESTIGATING THE EFFECT OF ELECTRON BEAM MELTING PARAMETERS ON THE Ti6Al4V ALLOY: A SIMULATION STUDY**
KÜÇÜKTÜRK G., Akillilar H.
Transactions of Famena, vol.46, no.4, pp.45-58, 2022 (SCI-Expanded)
- XV. **Experimental and numerical study for direct powder bed selective laser processing (sintering/melting) of silicon carbide ceramic**
Monton A., Abdelmoula M., KÜÇÜKTÜRK G., Maury F., Grossin D., Ferrato M.
MATERIALS RESEARCH EXPRESS, vol.8, no.4, 2021 (SCI-Expanded)
- XVI. **The influence of shot peening on the fatigue response of Ti-6Al-4V surfaces subject to different machining processes**
Xu Z., Dunleavey J., Antar M., Hood R., Soo S. L., Kucukturk G., Hyde C. J., Clare A. T.
International Journal of Fatigue, vol.111, pp.196-207, 2018 (SCI-Expanded)
- XVII. **Effect of electrical discharge machining on dental Y-TZP ceramic-resin bonding**
Rona N., YENİSEY M., KÜÇÜKTÜRK G., GÜRÜN H., ÇOĞUN C., ESEN Z.
JOURNAL OF PROSTHODONTIC RESEARCH, vol.61, no.2, pp.158-167, 2017 (SCI-Expanded)
- XVIII. **Effect of matrix temperature and powder size on the infiltration height of SiO₂-reinforced Al 7075 matrix composites produced by vacuum infiltration**
ÇALIN R., PUL M., BİCAN O., KÜÇÜKTÜRK G.
SCIENCE AND ENGINEERING OF COMPOSITE MATERIALS, vol.24, no.1, pp.149-153, 2017 (SCI-Expanded)
- XIX. **The effect of minimum quantity lubrication under different parameters in the turning of AA7075 and AA2024 aluminium alloys**
Cakir A., YAĞMUR S., Kavak N., KÜÇÜKTÜRK G., Seker U.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.84, pp.2515-2521, 2016 (SCI-

Expanded)

- XX. **Experimental investigation of the effects of clearance on product quality in AA5754 sheet material blanking process and estimation by fuzzy logic** AA5754 Malzemenin kesme işlemlerinde kesme boşluğunun ürün kalitesine etkilerinin deneysel incelenmesi ve bulanık mantık ile tahmini
Kucukturk G.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.31, no.2, pp.285-294, 2016 (SCI-Expanded)
- XXI. **Modeling and analyzing the effects of experimentally determined torque and thrust force on cutting tool according to drilling parameters**
KÜÇÜKTÜRK G.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART B-JOURNAL OF ENGINEERING MANUFACTURE, vol.227, no.B1, pp.84-95, 2013 (SCI-Expanded)
- XXII. **An Investigation of Thermal Properties of Zirconia Coating on Aluminum**
URTEKİN L., KÜÇÜKTÜRK G., KARAÇAY T., USLAN İ., SALMAN S.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.37, no.8, pp.2323-2332, 2012 (SCI-Expanded)
- XXIII. **GEOMETRICAL APPROACH FOR REDUCTION OF TOOL SHAPE DEGENERATION IN ELECTRIC DISCHARGE MACHINING (EDM)**
Cogun C., Deniz T. C., KÜÇÜKTÜRK G.
MACHINING SCIENCE AND TECHNOLOGY, vol.16, no.3, pp.445-458, 2012 (SCI-Expanded)
- XXIV. **Effects of reinforcement volume fraction on the abrasive wear behaviour of Al-MgO composites produced by the vacuum infiltration method**
Pul M., KÜÇÜKTÜRK G., Calin R., Seker U.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART J-JOURNAL OF ENGINEERING TRIBOLOGY, vol.225, pp.84-90, 2011 (SCI-Expanded)
- XXV. **A NEW METHOD FOR MACHINING OF ELECTRICALLY NONCONDUCTIVE WORKPIECES USING ELECTRIC DISCHARGE MACHINING TECHNIQUE**
KÜÇÜKTÜRK G., Cogun C.
MACHINING SCIENCE AND TECHNOLOGY, vol.14, no.2, pp.189-207, 2010 (SCI-Expanded)

Articles Published in Other Journals

- I. **Process parameters investigation for direct powder bed selective laser processing of silicon carbide parts**
Zarazaga A. M., Abdelmoula M., KÜÇÜKTÜRK G., Maury F., Ferrato M., Grossin D.
PROGRESS IN ADDITIVE MANUFACTURING, vol.7, no.6, pp.1307-1322, 2022 (ESCI)
- II. **Experimental Optimization of Drilling Parameters in Tooling for Euro 7 Nozzle Production**
KÜÇÜKTÜRK H., KÜÇÜKTÜRK G., YAVAŞ Ç., KATMER Ş., ŞEKER U.
International Journal of Automotive Science And Technology, vol.5, no.3, pp.254-265, 2021 (Peer-Reviewed Journal)
- III. **AA7075 Matrisli B4C+SiC Takviyeli Hibrit Kompozitlerin Toz Takviyeli EEİ Yöntemiyle İşlenmesinde Boşalım Akımı ve Takviye Oranının İşlenmiş Yüzeyin Mikroyapısı ve Pürüzlülüğüne Etkisi**
KESKİN G., KÜÇÜKTÜRK G., PUL M., GÜRÜN H., BAYDAROĞLU V.
Uluslararası Mühendislik Araştırma ve Geliştirme Dergisi, vol.13, no.2, pp.489-495, 2021 (Peer-Reviewed Journal)
- IV. **Design and Analysis of Lightweight Automotive Component for Turbocharger Units**
TÜZEMEN M. Ç., AĞAOĞLU M., KARAKAYA M., SALAMCI E., KÜÇÜKTÜRK G.
Manufacturing Science and Technology, vol.3, no.5, pp.278-285, 2015 (Peer-Reviewed Journal)
- V. **ELEKTRO EROZYON İLE İŞLEMEDE ELEKTRİK İLETKEN OLMAYAN İŞ PARÇALARININ İŞLENMESİ İÇİN YENİ BİR YÖNTEM GELİŞTİRİLMESİ**
KÜÇÜKTÜRK G., ÇOĞUN C.
MÜHENDİS VE MAKİNA, vol.50, no.594, pp.8-13, 2009 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Circular Tool Shoulder End Features on Mechanical Properties of Friction Stir Welded Aluminum 6061 Alloy**
Arıbal T., Kaya D., Küçüktürk G.
International Conference on Advanced Materials Science & Engineering and High Tech Devices Applications; Exhibition (ICMATSE 2020), Ankara, Turkey, 27 October 2022, pp.6-11
- II. **EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF PROCESS PARAMETERS ON SURFACE QUALITY AND DIMENSIONAL ACCURACY IN MACHINING OF AISI D2 TOOL STEEL BY EDM**
KARADAĞ E., GÜRÜN H., DİLİPAK H., KÜÇÜKTÜRK G., GÜRKAN D.
8th INTERNATIONAL MARDIN ARTUKLU SCIENTIFIC RESEARCHES CONFERENCE, Mardin, Turkey, 04 June 2022, pp.920-930
- III. **Study the Effects of Electron Beam Welding Process Parameters on Thick Al6061 T6 Material**
KÜÇÜKTÜRK G., ATKAYA M.
International Conference on Advanced Materials Science & Engineering and High Tech Devices Applications; Exhibition (ICMATSE 2020), Ankara, Turkey, 02 October 2020, pp.22-28
- IV. **A Review on Using of Directed Energy Deposition (DED) in Manufacturing Processes**
KAHYA H., KÜÇÜKTÜRK G., Mohamed H., GÜRÜN H.
International Conference on Advanced Materials Science & Engineering and High Tech Devices Applications; Exhibition (ICMATSE 2020), Ankara, Turkey, 02 October 2020
- V. **Investigation of Formability and Springback Behaviors of Docol 1400 Sheet Material**
Tahta M., Küçüktürk G., Gürün H., Karaağaç I.
3. International Scientific and Vocational Studies Congress-Engineering, Nevşehir, Turkey, 27 - 29 June 2019, pp.402-407
- VI. **DP600 ve DP1000 Çift Fazlı Çelik Malzemelerin U-bükme İşleminde Geri Esnemenin Azaltılması**
YILDIRIM S., GÜRÜN H., DİLİPAK H., KÜÇÜKTÜRK G., ERSÖZ C.
3. International Scientific and Vocational Studies Congress-Engineering, Nevşehir, Turkey, 27 - 29 June 2019
- VII. **DP600 ve DP1000 Çift Fazlı Çelik Malzemelerin U-Bükmede Köşe Ezme İşleminin Geri Esnemeye Etkisi**
Yıldırım S., Gürün H., Dilipak H., Küçüktürk G., Ersöz C.
1. Ulusal Mühendislikte Bilimsel ve Mesleki Çalışmaları Kongresi, Nevşehir, Turkey, 27 - 29 June 2019, pp.21-25
- VIII. **Investigation of the Formability of DP600 Dual Phase Sheet Material by Fluid Pressure Assisted Single Point Incremental Forming Method**
GÜRÜN H., ÇAVUŞOĞLU O., KÜÇÜKTÜRK G., ÇETİNKAYA O.
UDCS'xx19 Fourth International Iron and Steel Symposium, Karabük, Turkey, 4 - 06 April 2019
- IX. **Investigation of the Formability of Al6061 Aluminum Sheet Material by Fluid Pressure Assisted Single Point Incremental Forming Method**
GÜRÜN H., ÇAVUŞOĞLU O., KÜÇÜKTÜRK G., ÇETİNKAYA O.
4th International Conference on Engineering Technology and Applied Sciences, KİEV, Ukraine, 24 - 28 April 2019
- X. **Effects Of Process Parameters In The Machining of AA 7075 Alloy Reinforced with B4C Composite by Powder-Mixed Electrical Discharge Machining**
KÜÇÜKTÜRK G., KESKİN G., PUL M., BAYDAROĞLU V., GÜRÜN H.
ICELIS, 11 - 14 April 2019
- XI. **An Investigation of Material Removal Rate and Tool Wear Rate in Powder Mixed EDM Machining Process of Al2014 Alloy Reinforced with B4C Composites**
Küçüktürk G., Şeker U., Joudı J., Kaya D., Ahmadınia O. F., Çalın R.
The 18th International Conference on Machine Design and Production, Eskişehir, Turkey, 3 - 06 July 2018
- XII. **Experimental Investigation of Machining Characteristics for Al2014 Alloy Reinforced with TiB2 Composites in Powder-Mixed EDM**
KÜÇÜKTÜRK G., JOUDI J., ÇALIN R., ŞEKER U., GÜRÜN H., AHMADINIA O. F.
18th INTERNATIONAL CONFERENCE ON MACHINE DESIGN AND PRODUCTION, 3 - 06 July 2018

- XIII. **MACHINABILITY OF MICRO DEEP HOLE FOR Ti6Al4V ELI AND AISI 316L STAINLESS STEEL USING EDM**
BAVIL A. K., KÜÇÜKTÜRK G., ÖZERKAN H. B.
7th INTERNATIONAL SYMPOSIUM ON MACHINING, 3 - 05 November 2016, pp.460-471
- XIV. **An Experimental Study Of The EffectOf Abrasive Water Jet And Laser Beam On The Surface Integrity**
Kaya D., Küçüktürk G., Özerkan H. B.
The9th International Symposium Kod 2016 Machine And Industrial Design InMechanical Engineering, Veszprém, Hungary, 9 - 12 July 2016, pp.217-220
- XV. **COMPUTER-AIDED STRIP LAYOUT FOR PIERCING AND CUTTING DIES**
ÇAVUŞOĞLU O., KÜÇÜKTÜRK G.
The Ninth International SymposiumKOD 2016 Machine and Industrial Design in Mechanical Engineering, 9 - 12 June 2016
- XVI. **Wear Properties of In Situ Aluminum Matrix Composite Reinforced with Al2O3**
ERARSLAN Y., KELEŞOĞLU E., KÜÇÜKTÜRK G.
Materials Science and Technology (MS&T), Houston, Texas, United States Of America, 17 - 21 October 2010, pp.2182-2189
- XVII. **Wear properties of in-situ aluminum matrix composite reinforced with Al2O3**
ERARSLAN Y., Kelesoglu E., KÜÇÜKTÜRK G.
Materials Science and Technology Conference and Exhibition 2010, MS and T'10, Houston, TX, United States Of America, 17 - 21 October 2010, vol.3, pp.2182-2188

Supported Projects

- KÜÇÜKTÜRK G., KAYA D., Project Supported by Higher Education Institutions, Mühendislik seramiklerinin SLM eklemeli imalat yöntemi ile üretilebilirliğinin incelenmesi, 2022 - Continues
- Küçüktürk G., Horizon Europe Project, DOC-3D PRINTING-Development of Ceramics 3D Printing Additive Manufacturing, 2018 - 2023
- KÜÇÜKTÜRK G., TUBITAK Project, GAZI ÜNİVERSİTESİ TEKNOLOJİ TRANSFER OFİSİ, 2016 - 2020
- KÜÇÜKTÜRK G., TUBITAK Project, SERAMİK MALZEME KULLANAN ÜÇ BOYUTLU YAZICI TASARIMI VE PROTOTİP İMALATI, 2017 - 2018
- Küçüktürk G., TUBITAK Project, Üniversitelerde Girişimcilik Sertifika Programı Oluşturulması ve Yürütülmesi, 2016 - 2018
- KÜÇÜKTÜRK G., TUBITAK Project, LAZER İŞİNİ KULLANILARAK KATMANLI İMALAT TEKNOLOJİSİNDE ÜRETİM YAPAN MAKİNE VE ALT ÜNİTELERİ İLE FARKLI TÜRDE TOZ ÜRETEN ATOMİZASYON KULELERİ TASARIM VE PROTOTİP İMALATLARI, 2014 - 2018

Patent

- KÜÇÜKTÜRK G., Elektro erozyon ile işleme yardımıyla elektriksel iletken olmayan iş parçalarının işlenmesi için bir yöntem, Patent, CHAPTER F Mechanical engineering; Lighting; Heating; Weaponry; Destroyed Materials, 2008

Activities in Scientific Journals

- Frontiers in Materials, Editor, 2022 - Continues
- GAZI UNIVERSITY JOURNAL OF SCIENCE, Editor, 2021 - Continues

Memberships / Tasks in Scientific Organizations

THE SCIENTIFIC AND TECHNOLOGICAL RESEARCH COUNCIL OF TÜRKİYE, Executive Board Member, 2023 - Continues,
Turkey

Metrics

Publication: 49
Citation (WoS): 124
Citation (Scopus): 184
H-Index (WoS): 6
H-Index (Scopus): 7

Scholarships

2219, TUBITAK, 2014 - 2015

Non Academic Experience

TÜBİTAK TEYDEB
MİLLİ SAVUNMA BAKANLIĞI İlaç Fabrikası Komutanlığı
ANKARA ADLI TIP GRUP BASKANLIGI
ÇEVRE VE ŞEHİRCİLİK BAKANLIĞI İLLER BANKASI A.Ş.