

Assoc. Prof. MUSTAFA TÜMER

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: F-7418-2018

Yoksis Researcher ID: 29054

Education Information

Doctorate, Sakarya University, Faculty Of Technical Education, Department Of Metal Education, Turkey 2005 - 2012

Postgraduate, Sakarya University, Faculty Of Technical Education, Department Of Metal Education, Turkey 2002 - 2004

Undergraduate, Bülent Ecevit Üniversitesi, Karabük Teknik Eğitim Fakültesi, Metal Öğretmenliği Pr., Turkey 1996 - 2000

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Koruyucu gaz kompozisyonunun özlü tel ark kaynak yöntemi ile birleştirilen paslanmaz çeliklerin mekanik ve mikroyapı özelliklerine etkisi, Sakarya Üniversitesi, Teknik Eğitim Fakültesi, Metal Eğitimi Bölümü, 2012

Postgraduate, SİLİSYUM NİTRÜR TOZU ÜRETİMİ VE SİNERLENMESİ, Sakarya Üniversitesi, Teknik Eğitim Fakültesi, Metal Eğitimi Bölümü, 2004

Research Areas

Mechanical Properties, Joining and Cutting, Nondestructive Testing

Academic Titles / Tasks

Associate Professor, Kocaeli University, Uzunçiftlik Nuh Çimento Meslek Yüksekokulu, Makine ve Metal Teknolojileri, 2023 - Continues

Assistant Professor, Gedik Üniversitesi, Gedik Meslek Yüksekokulu, Makine Ve Metal Teknolojileri Bölümü, 2013 - 2013

Academic and Administrative Experience

Kocaeli Üniversitesi, Uzunçiftlik Nuh Çimento Meslek Yüksekokulu, Makine Ve Metal Teknolojileri Bölümü, 2014 - 2017

Courses

Welding Technology Applications on Aircrafts, Postgraduate, 2023 - 2024, 2022 - 2023
MIG MAG Welding Techniques, Associate Degree, 2023 - 2024
Material Inspection Methods, Associate Degree, 2023 - 2024
Welding of Non-ferrous Alloys, Associate Degree, 2022 - 2023
Repair Welding, Associate Degree, 2022 - 2023
Fundamentals of Welded Design, Associate Degree, 2022 - 2023
Quality Control in Welding, Associate Degree, 2023 - 2024
Work Safety, Associate Degree, 2023 - 2024
Welding Codes and Standards, Associate Degree, 2022 - 2023
TIG ve SAW Welding Techniques, Associate Degree, 2022 - 2023
Welding of Stainless Steel, Associate Degree, 2023 - 2024
Business English, Associate Degree, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Welding of S1100 Ultra high-Strength Steel Plates with Matching Metal-Cored Filler Wire: Microstructure, Residual Stresses, and Mechanical Properties**
TÜMER M., Pixner F., Vallant R., Warchomicka F. G., Domitner J., Enzinger N.
STEEL RESEARCH INTERNATIONAL, 2024 (SCI-Expanded)
- II. **Impact sliding wear behavior of Stellite 6 and Stellite 12 hardfacings**
Ateş S., Aslan O., TÜMER M., Arısoy C. F.
Materials Chemistry and Physics, vol.313, 2024 (SCI-Expanded)
- III. **Investigation of microstructure, mechanical and corrosion properties of GMAW of dissimilar P91-HP alloy V-butt groove joint**
Atapek Ş. H., Tümer M., Kısasöz A., Mert T., Kerimak M. Z.
MATERIALS CHEMISTRY AND PHYSICS, vol.313, pp.1-13, 2024 (SCI-Expanded)
- IV. **The effect of weaving and non-weaving multi-pass procedure on microstructure and mechanical properties in GMAW of S960QL**
MERT T., Gürol U., TÜMER M.
International Journal of Advanced Manufacturing Technology, vol.129, no.9-10, pp.4731-4742, 2023 (SCI-Expanded)
- V. **The effect of heat input in multi-pass GMAW of S960QL UHSS based on weaving and stringer bead procedure on microstructure and mechanical properties of HAZ**
MERT T., Gürol U., TÜMER M.
Materials Research Express, vol.10, no.8, 2023 (SCI-Expanded)
- VI. **Experimental Investigation of Wire Arc Additively Manufactured Inconel 625 Superalloy**
Gürol U., TÜMER M., Dilibal S.
Transactions of the Indian Institute of Metals, vol.76, no.5, pp.1371-1379, 2023 (SCI-Expanded)
- VII. **Microstructural, mechanical and corrosion behavior of UNS S31803/Hastelloy C-276 dissimilar metal welds**
ATAPEK Ş. H., TÜMER M., Çelikkol E., KISASÖZ A., Kerimak M. Z.
CIRP Journal of Manufacturing Science and Technology, vol.40, pp.129-141, 2023 (SCI-Expanded)
- VIII. **Fusion welding of ultra-high strength structural steels-A review**
TÜMER M., Schneider-Bröskamp C., Enzinger N.
JOURNAL OF MANUFACTURING PROCESSES, vol.82, pp.203-229, 2022 (SCI-Expanded)
- IX. **Undermatched Welding of Ultra-High-Strength Steel S1100 with Metal-Cored Wire: Influence of Welding Positions on Mechanical Properties**
TÜMER M., Vallant R., Warchomicka F. G., Enzinger N.

- JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.31, no.9, pp.7068-7079, 2022 (SCI-Expanded)
- X. **Mechanical and microstructural properties of S1100 UHSS welds obtained by EBW and MAG welding**
TÜMER M., Pixner F., Vallant R., Domitner J., Enzinger N.
WELDING IN THE WORLD, vol.66, no.6, pp.1199-1211, 2022 (SCI-Expanded)
- XI. **Residual Stresses, Microstructure, and Mechanical Properties of Electron Beam Welded Thick S1100 Steel**
TÜMER M., Pixner F., Enzinger N.
JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.31, no.3, pp.2136-2146, 2022 (SCI-Expanded)
- XII. **Electron beam and metal active gas welding of ultra-high-strength steel S1100MC: influence of heat input**
TÜMER M., Domitner J., Enzinger N.
INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.119, no.1-2, pp.587-598, 2022 (SCI-Expanded)
- XIII. **Mechanical and microstructural characterization of solid wire undermatched multilayer welded S1100MC in different positions**
TÜMER M., Warchomicka F. G., Pahr H., Enzinger N.
JOURNAL OF MANUFACTURING PROCESSES, vol.73, pp.849-860, 2022 (SCI-Expanded)
- XIV. **Microstructure, mechanical and corrosion properties of nickel superalloy weld metal**
Kisasoz A., TÜMER M., KARAASLAN A.
MATERIALS TESTING, vol.63, no.10, pp.895-900, 2021 (SCI-Expanded)
- XV. **Microstructure, mechanical and corrosion properties of uns 32205 duplex stainless steel weldment joints by multipass fcaw Gefüge und mechanische sowie Korrosionseigenschaften von durch FCAW-Mehrlagenschweißen hergestellten Schweißverbindungen aus rostfreiem Duplex-Stahl UNS 32205**
Kisasoz A., Tumer M., Karaaslan A.
Praktische Metallographie/Practical Metallography, vol.58, no.6, pp.332-353, 2021 (SCI-Expanded)
- XVI. **Investigation of microstructure, mechanical, and corrosion behavior of nickel-based alloy 625/duplex stainless steel UNS S32205 dissimilar weldments using ERNiCrMo-3 filler metal**
TÜMER M., MERT T., Karahan T.
WELDING IN THE WORLD, vol.65, no.2, pp.171-182, 2021 (SCI-Expanded)
- XVII. **Microstructure, mechanical and corrosion properties of TIG welded Hastelloy C-276**
TÜMER M.
MATERIALS TESTING, vol.62, no.9, pp.883-887, 2020 (SCI-Expanded)
- XVIII. **Properties of UNS 10276 Nickel Alloy and SA 516 GR 70 Steel Dissimilar Weldment**
TÜMER M., ATAPEK Ş. H., Kerimak M. Z., Uluvar F.
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, vol.57, no.8, pp.516-535, 2020 (SCI-Expanded)
- XIX. **Characterization of Dissimilar Joints Between Hastelloy C276 Nickel Alloy and AISI 316L Austenitic Stainless Steel**
TÜMER M., ATAPEK Ş. H., Kerimak M. Z., Uluvar F.
PRAKTISCHE METALLOGRAPHIE-PRACTICAL METALLOGRAPHY, vol.57, no.4, pp.260-278, 2020 (SCI-Expanded)
- XX. **Evaluation of microstructural and mechanical properties of dissimilar Inconel 625 nickel alloy–UNS S32205 duplex stainless steel weldment using MIG welding**
TÜMER M., Karahan T., MERT T.
Welding in the World, vol.64, no.1, pp.21-35, 2020 (SCI-Expanded)
- XXI. **Investigations on mechanical strength and microstructure of multi-pass welded S690QL HSLA steel using MAG and FCAW Untersuchungen zur mechanischen Festigkeit und Mikrostruktur von mehrfach geschweißtem S690QL HSLA-Stahl mittels MAG und FCAW**
MERT T., TÜMER M., Kerimak Z.
Praktische Metallographie/Practical Metallography, vol.56, no.10, pp.634-654, 2019 (SCI-Expanded)
- XXII. **Characterization of microstructure, chemical composition, and toughness of a multipass welded joint of austenitic stainless steel AISI316L**
TÜMER M., Yilmaz R.

INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.87, pp.2567-2579, 2016 (SCI-Expanded)

XXIII. Strengthening of AISI 2205 duplex stainless steel by strain ageing

Karahan T., Emre H. E., TÜMER M., KAÇAR R.

MATERIALS & DESIGN, vol.55, pp.250-256, 2014 (SCI-Expanded)

XXIV. Microstructural studies and impact toughness of dissimilar weldments between AISI 316 L and AH36 steels by FCAW

Yilmaz R., Tumer M.

INTERNATIONAL JOURNAL OF ADVANCED MANUFACTURING TECHNOLOGY, vol.67, pp.1433-1447, 2013 (SCI-Expanded)

Articles Published in Other Journals

- I. **Investigation of the Effect of Solid Wire and Flux Combinations Used in Submerged Arc Welding of the LPG Cylinders on Mechanical Properties**
Nuhoglu U., Mert T., Tümer M.
Çukurova Üniversitesi Mühendislik Fakültesi dergisi, vol.37, no.2, pp.509-517, 2022 (Peer-Reviewed Journal)
- II. **Microstructural Analysis of Inconel 625 Nickel Alloy / UNS S31803 Duplex Stainless-Steel Dissimilar Weldments**
KARAHAN T., MERT T., TÜMER M., Kerimak M. Z.
Advanced Technologies and Materials, vol.44, no.1, pp.15-19, 2019 (Scopus)
- III. **Inconel 625-AISI 304L Malzeme Çiftinin Yüksek Nikelli İlave Metal ile Birleştirilmesi: Mikroyapısal ve Mekanik Özellikler**
TÜMER M.
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, pp.73-82, 2018 (Peer-Reviewed Journal)
- IV. **Kamu Üniversite Sanayi İşbirliğinin (KÜSİ) Geliştirilmesine Yönelik Kartepe Test ve Araştırma Merkezi (KARTEAM) Kurulum Projesi**
AKTAŞ S., KELEBEKLER E., ÇALIŞKAN A., TÜMER M., AYAZ M., YEĞİN E., ÖZDEMİR E.
Teknik Bilimleri Dergisi, vol.8, pp.22-28, 2018 (Peer-Reviewed Journal)
- V. **Kartepe Test ve Araştırma Merkezi (KARTEAM) Projesinin Mesleki Eğitim ve İstihdama Katkısı**
KELEBEKLER E., AYAZ M., ÇALIŞKAN A., AKTAŞ S., TÜMER M., YEĞİN E., ÖZDEMİR E.
Journal of Technical Sciences, vol.8, pp.23-30, 2018 (Peer-Reviewed Journal)
- VI. **Nikel Bazlı Süper Alaşım Inconel 625 ile AISI 304L Paslanmaz Çelik Malzeme Çiftinin Birleştirilmesinde Farklı İlave Metallerin Tokluk ve Mikroyapısal Özelliklere Etkisi**
TÜMER M., KERİMAK Z. M.
El-Cezeri Journal of Science and Engineering, vol.4, pp.116-126, 2017 (Scopus)
- VII. **Sinterability of silicon nitride powder produced by the CRN process**
Atasoy A., Tümer M.
Solid State Phenomena, pp.896-901, 2009 (Scopus)
- VIII. **Gemi Saclarının Tozaltı Ve Özlü Tel Kullanarak Mag Kaynağı İle Birleştirilmesi Ve Mekanik Özellikleri**
YILMAZ R., TÜMER M.
TÜBAV BİLİM DERGİSİ, vol.2, pp.88-98, 2009 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Endüstri Tabanlı Mesleki Eğitim Modeli: İstihdam ve Nitelikli İşgücünün Geliştirilmesi**
Kelebekler E., Ayaz M., Aktaş S., Çalışkan A., Tümer M., Sezen S., Esen Erden K., Özdemir E.
11. Uluslararası Meslek Yüksekokulları Sempozyumu, Düzce, Turkey, 05 October 2023, pp.55
- II. **Undermatched welding of ultra-high strength steels S1100 with metal-cored wire - Influence of**

welding positions on mechanical properties

TÜMER M., WARCHOMICKA F. G., VALLANT R., ENZINGER N.

EUROPEAN CONGRESS AND EXHIBITION ON ADVANCED MATERIALS AND PROCESSES - EUROMAT 2021, Graz, Austria, 16 September 2021

- III. **Investigation of Microstructure and Corrosion Properties of the Inconel 625 Weld**
TÜMER M., KISASÖZ A., KARAASLAN A., KERİMAK M.
5th International Conference on Welding Technologies and Exhibition, Bosnia And Herzegovina, 26 - 28 September 2018, pp.273-277
- IV. **Microstructural Analysis of Inconel 625 Nickel Alloy / UNS S31803 Duplex Stainless Steel Dissimilar Weldments**
KARAHAN T., MERT T., TÜMER M., KERİMAK M. Z.
The 4th IIW South-East European Welding Congress, 10 - 13 October 2018
- V. **A Fractographical Study on Dissimilar Weld Joints of SAF 2205 and Hastelloy C-276**
Çelikkol E., TÜMER M., ATAPEK Ş. H., Kerimak M. Z.
5th International Conference of Engineering Against Failure, ICEAF-V 2018, Chios, Greece, 20 - 22 June 2018, vol.188
- VI. **Contribution of Kartepe Test and Research Center (KARTEAM) Project to Applied Technical Education**
AKTAŞ S., TÜMER M., ÇALIŞKAN A., KELEBEKLER E., AYAZ M., YEĞİN E., ÖZDEMİR E.
1st International Symposium on Recent Advances in Vocational Sciences, 11 - 13 April 2018
- VII. **Kartepe Test and Research Center (KARTEAM) Project for the Development of University Industry Cooperation in Kocaeli Province**
KELEBEKLER E., AYAZ M., AKTAŞ S., TÜMER M., ÇALIŞKAN A., YEĞİN E., ÖZDEMİR E.
1st International Symposium on Innovative Approaches in Scientific Studies, 11 - 13 April 2018
- VIII. **The Effect of MAG and FCAW Methods on Microstructure and Impact Toughness of Multi-pass Welded Weldox 700**
MERT T., TÜMER M., KERİMAK M. Z.
8th International Advanced Technologies Symposium (IATS'17), Elazığ, Turkey, 19 - 22 October 2017, pp.1824-1832
- IX. **Microstructural and mechanical characterization of dissimilar metal weld between Hastelloy C-276 and AISI 316L austenitic stainless steel**
TÜMER M., ATAPEK Ş. H., KERİMAK M. Z., ULUVAR F.
VIII. International Advanced Technologies Symposium, Elazığ, Turkey, 19 - 22 October 2017, vol.9, pp.1916-1922
- X. **The Investigation of Microstructure of Duplex Stainless Steel Welded by FCAW Method**
TÜMER M., YILMAZ R.
3rd Iron and Steel Symposium(UDCS'17)3-5April 2017 Karabük-TURKEY, Karabük, Turkey, 3 - 05 April 2017, pp.386-390
- XI. **Effect of Multipass Welding on Microstructure and Mechanical Properties of AISI 2205 Duplex Stainless Steel**
KISASÖZ A., TÜMER M., KARAASLAN A.
3rd International Iron Steel Symposium, 3 - 05 April 2017, pp.66-68
- XII. **Zırh Çeliği ile Östenitik Paslanmaz Çelik Çiftinin Gaz Metal Ark Kaynak Kabiliyeti**
KAÇAR R., ERTEK EMRE H., TÜMER M., SANCAR E.
IDEFIS2017, II. Uluslararası savunma sanayi konferansı, 6 - 08 April 2017
- XIII. **Özlü Tel ile Birleştirilen Dupleks Paslanmaz Çeliklerin Isı Etkisi Altındaki Bölgede Meydana Gelen Değişiklerin İncelenmesi**
TÜMER M., YILMAZ R.
16th International Materials Symposium IMSP'2016, 12 - 14 October 2016
- XIV. **Nikel Bazlı Süper Alaşım Inconel 625 ile AISI 304L Paslanmaz Çelik Malzeme Çiftinin Birleştirilmesinde Farklı İlave Metallerin Tokluk ve Mikroyapısal Özelliklere Etkisi**
TÜMER M., KERİMAK M. Z.

4th International Conference on Welding Technologies and Exhibition (ICWET'16), 11 - 13 May 2016

- XV. **Karbo-Termal İndirgeme ve Nitrürleme (KTİN) Prosesinde Deney Şartlarının (t/T) Si₃N₄ Oluşumuna Etkileri**
ATASOY A., TÜMER M.
4th International Powder Metallurgy Conference, Sakarya, Turkey, 18 - 20 May 2005, pp.1299-1308
- XVI. **Özlü Tel Ark Kaynağı ile Birleştirilen Yüksek Mukavemetli Düşük Alaşımlı Çelik Kaynak Metallerinin Darbe Tokluğunun İncelenmesi**
YILMAZ R., ÇELİK F., TÜMER M.
ICWET 2012, Ankara, Turkey, 23 - 25 May 2012, pp.494-503
- XVII. **Özlü Tel ile Birleştirilen AISI 316 L Östenitik Paslanmaz Çelik Malzemenin Tokluk ve Mikroyapı Özellikleri**
TÜMER M., YILMAZ R.
International Conference on Welding Technologies and Exhibition, Ankara, Turkey, 23 - 25 May 2012, pp.485-493
- XVIII. **AH36-316L Malzeme Çiftinin Özlü Tel ile Birleştirilmesinde Mekanik Mikroyapı İlişkisinin İncelenmesi**
TÜMER M., YILMAZ R.
International Iron & Steel Symposium, Kocaeli, Turkey, 2 - 06 April 2012, pp.818-825
- XIX. **Özlü Tel Ark Kaynağı ile Birleştirilen Yüksek Mukavemetli Düşük Alaşımlı Çeliklerin Çekme Dayanımının İncelenmesi**
ÇELİK F., TÜMER M., YILMAZ R.
International Iron & Steel Symposium, Karabük, Turkey, 2 - 06 April 2012, pp.789-796
- XX. **The Effect of Different Welding Processes on the Duplex Stainless Steel Cladding Quality**
TÜMER M., KARAHAN T.
International Congress on Advances in Welding Science and Technology for Construction, Energy and Transportation Systems (AWST - 2011), Antalya, Turkey, 24 - 25 October 2011
- XXI. **The Effects of Welding Parameters and Gases Composition on Microstructure and Penetration of Stainless Steels**
TÜMER M., YILMAZ R.
International Congress on Advances in Welding Science and Technology for Construction, Energy and Transportation Systems (AWST - 2011), Antalya, Turkey, 24 - 25 October 2011
- XXII. **The Effect of Shielding Gases on the Microstructure and Toughness of Stainless Steels Weldments by FCAW**
YILMAZ R., TÜMER M.
63rd Annual Assembly International Conference of the International Institute of Welding, İstanbul, Turkey, 11 - 17 July 2010, pp.847-852
- XXIII. **Kuvars SiO₂'den Si₃N₄ Tipi Teknolojik Seramik Toz Üretimi Ve Karakterizasyonu Kuvars SiO₂'den Si₃N₄ Tipi Teknolojik Seramik Toz Üretimi ve Karakterizasyonu**
ATASOY A., TÜMER M.
4th International Powder Metallurgy Conference, Sakarya, Turkey, 18 - 22 May 2005, pp.958-968

Supported Projects

TÜMER M., Project Supported by Higher Education Institutions, MAG VE FCAW YÖNTEMLERİ İLE BİRLEŞTİRİLEN WELDOX 700 MALZEMENİN, İLAVE METAL VE ISI GİRDİSİNE BAĞLI MEKANİK VE MİKROYAPISAL ÖZELLİKLERİNİN İNCELENMESİ, 2017 - 2018

KELEBEKLER E., AKTAŞ S., ERGÜN R. E., TÜMER M., Project Supported by Higher Education Institutions, SİLİKON TABANLI GÜNEŞ PANELLERİNİN SABİT ÇALIŞMA SICAKLIĞINDA ÇALIŞTIRILABİLMESİ AMACIYLA KONTROL VE DENEY DÜZENİĞİNİN OLUŞTURULMASI VE GERÇEKLEŞTİRİLMESİ, 2017 - 2018

TÜMER M., Project Supported by Higher Education Institutions, YÜKSEK MUKAVEMETLİ ÇELİKLERİN BİRLEŞTİRİLMESİNDE KULLANILAN YENİ İLAVE METALLERİN, KAYNAK METALİNİN MEKANİK VE MİKROYAPISAL ÖZELLİKLERE ETKİSİNİN İNCELENMESİ, 2014 - 2015

Scientific Research / Working Group Memberships

Commission IX Of The International Institute Of Welding, International Institute of Welding, Turkey,
<https://iiwelding.org/iiw-working-groups/iiw-c-ix/>, 2023 - Continues

Mobility Activity

Post Doc, Post Doc, Technische Universitaet Graz, Austria, 2020 - 2021

Metrics

Publication: 55

Citation (WoS): 186

Citation (Scopus): 213

H-Index (WoS): 7

H-Index (Scopus): 8

Non Academic Experience

Business Establishment Private, Gedik Holding, Gedik Education Foundation

Gedik Holding - Gedik Eğitim Vakfı - Gedik Üniversitesi

Business Establishment Private, Türker Shipyard, Welding - NDT

Business Establishment Private, Türker Shipyard, Welding-NDT

Public Corporation, Gölcük Vocational Training Center, Metal Technology