

Prof. RUKİYE ERTAN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: KIH-2391-2024

ScopusID: 35772500300

Yoksis Researcher ID: 191606

Education Information

Doctorate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Makine Mühendisliği (Dr), Turkey 2002 - 2009

Postgraduate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Makine Mühendisliği (YI) (Tezli), Turkey 2000 - 2002

Undergraduate, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, Makine Mühendisliği Bölümü, Turkey 1996 - 2000

Dissertations

Doctorate, Fren balata malzemelerinin optimizasyonu ve üretim parametrelerinin analizi, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 2009

Postgraduate, Fren performansının artırılması, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 2002

Research Areas

Mechanical Engineering, Construction and Manufacturing, Tribology, NDT Engineering, Welding Methods, Material, Plastic Forming Methods, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, OTOMOTİV MÜHENDİSLİĞİ, 2014 - Continues

Assistant Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, OTOMOTİV MÜHENDİSLİĞİ, 2013 - 2014

Research Assistant, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, MAKİNA MÜHENDİSLİĞİ, 2000 - 2013

Academic and Administrative Experience

Head of Department, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, OTOMOTİV MÜHENDİSLİĞİ, 2013 - Continues

Courses

Otomotiv Mühendisliğinde Malzeme Seçimi, Postgraduate, 2020 - 2021
ÜRETİM YÖNTEMLERİ, Undergraduate, 2017 - 2018
MALZEME BİLİMİ, Undergraduate, 2017 - 2018, 2016 - 2017
otomotiv malzemeleri, Postgraduate, 2017 - 2018, 2016 - 2017
otomotiv malzemeleri, Undergraduate, 2017 - 2018, 2016 - 2017
taşıtlarda polimerlerin kullanımı, Postgraduate, 2017 - 2018, 2016 - 2017
taşıtlarda ileri üretim teknolojileri, Postgraduate, 2017 - 2018, 2016 - 2017
üretim teknolojileri, Undergraduate, 2016 - 2017
Taşıtlarda Hasar Analizi, Doctorate, 2016 - 2017
taşıtlarda ileri malzemelerin kullanımı, Doctorate, 2016 - 2017
kaynak teknolojisi, Undergraduate, 2016 - 2017

Advising Theses

ERTAN R., Investigation of mechanical behaviours of the titanium alloys after welding process, Postgraduate, S.Sezer(Student), 2019
ERTAN R., Mechanical and dimensional effect of laser welding process performed before and after plastic forming on titanium alloys, Postgraduate, S.Sevinç(Student), 2019
ERTAN R., Modelling and validation of metal spring connection between housing and reflector with different finite element techniques in automotive lighting, Postgraduate, İ.Yelek(Student), 2018
ERTAN R., Effect of type and thickness of core material on mechanical properties of carbon fiber reinforced honeycomb sandwich composites, Postgraduate, B.Gül(Student), 2018
ERTAN R., Welding parameters work in the body shop department in an automobile factory, Postgraduate, U.İş(Student), 2017
ERTAN R., Comparison of mechanical effect of different material usage in automotive passenger seat bearing with finite element method and tests, Postgraduate, F.Düvenci(Student), 2017
ERTAN R., Finite elements analysis of roof vibration of passenger car, Postgraduate, Ç.Akdeniz(Student), 2017
ERTAN R., Investigation of mechanical properties of different steels that applied spot resistance welding, Postgraduate, S.Aras(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **FORMABILITY CAPABILITIES AND MECHANICAL PROPERTIES OF TITANIUM TAILOR-WELDED BLANKS**
Erdogan O., Sevinc S., Ertan R.
MATERIALI IN TEHNOLOGIJE, no.3, pp.421-427, 2024 (SCI-Expanded)
- II. **STUDYING THE STRENGTH OF DISSIMILAR JOINTS OF AISI 430 AND 301 STAINLESS STEEL WELDED AT DIFFERENT WELDING PARAMETERS TRDNOST ZVARNIH SPOJEV MED NERJAVNIMA JEKLOMA VRSTE AISI 430 IN 301 V ODVISNOSTI OD RAZLIČNIH PARAMETROV VARJENJA**
Aras S., ERTAN R.
Materiali in Tehnologije, vol.58, no.2, pp.121-127, 2024 (SCI-Expanded)
- III. **Effect of temperature and rolling direction on the formability of CP2 and Ti-6Al-4V titanium materials**
Gokmen S., ERTAN R., Özgül H.
MATERIALS TESTING, vol.65, no.11, pp.1743-1751, 2023 (SCI-Expanded)
- IV. **A Comparative Study on Conventional and Hybrid Quenching Hot Forming Methods of 22MnB5 Steel for Mechanical Properties and Microstructure**

Esiyok F., ERTAN R., SEVİLGEN G., BULUT E., Ozturk F., Alyay I., Abi T. T.

JOURNAL OF MATERIALS ENGINEERING AND PERFORMANCE, vol.32, no.3, pp.1347-1356, 2023 (SCI-Expanded)

- V. **Forming evolution of titanium grade2 sheets**
TEKİN M., ERTAN R., Özgül H. G.
Materialpruefung/Materials Testing, vol.64, no.1, pp.116-124, 2022 (SCI-Expanded)
- VI. **Effect of deformation temperature on mechanical properties, microstructure, and springback of Ti-6Al-4V sheets**
ERTAN R., Cetin G.
REVISTA DE METALURGIA, vol.57, no.4, 2021 (SCI-Expanded)
- VII. **THE INVESTIGATION OF THE EFFECTS OF SPRAY PARAMETERS ON THE THERMAL AND MECHANICAL PROPERTIES OF 22MnB5 STEEL DURING HYBRID QUENCHING PROCESS**
Sevilgen G., Ertan R., Bulut E., Öztürk F., Esiyok F., Abi T. T., Alyay I.
HEAT TRANSFER RESEARCH, vol.52, no.14, 2021 (SCI-Expanded)
- VIII. **The flexural behavior of the epoxy and polyester based composite sandwich structures at subzero temperatures**
ERTAN R., KUŞ A., Durgun I.
MATERIALS LETTERS, vol.272, 2020 (SCI-Expanded)
- IX. **Mechanical properties of dissimilar Ti-Al resistance spot welds**
ERTAN R.
MATERIALS TESTING, vol.62, no.6, pp.597-602, 2020 (SCI-Expanded)
- X. **Shunting effects on the resistance spot welding parameters of DP600**
Aydin E., Ertan R.
MATERIALS TESTING, vol.62, pp.97-103, 2020 (SCI-Expanded)
- XI. **Experimental study on the flexural properties of 3D integrated woven spacer composites at room and subzero temperatures**
KUŞ A., Durgun I., ERTAN R.
JOURNAL OF SANDWICH STRUCTURES & MATERIALS, vol.20, no.5, pp.517-530, 2018 (SCI-Expanded)
- XII. **SYNERGISTIC EFFECT OF ORGANIC- AND CERAMIC-BASED INGREDIENTS ON THE TRIBOLOGICAL CHARACTERISTICS OF BRAKE FRICTION MATERIALS**
ERTAN R.
MATERIALI IN TEHNOLOGIJE, vol.50, no.2, pp.223-228, 2016 (SCI-Expanded)
- XIII. **EFFECT OF HEAT TREATMENT ON THE MICROSTRUCTURE AND MECHANICAL PROPERTIES OF 30MnB5 BORON STEEL**
GÜLER ÖZGÜL H., ERTAN R., Ozcan R.
MATERIALI IN TEHNOLOGIJE, vol.48, no.6, pp.971-976, 2014 (SCI-Expanded)
- XIV. **Investigation of the hot ductility of a high-strength boron steel**
GÜLER ÖZGÜL H., ERTAN R., Ozcan R.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.608, pp.90-94, 2014 (SCI-Expanded)
- XV. **Experimental investigation of FDM process for improvement of mechanical properties and production cost**
Durgun I., ERTAN R.
RAPID PROTOTYPING JOURNAL, vol.20, no.3, pp.228-235, 2014 (SCI-Expanded)
- XVI. **Characteristics of 30MnB5 boron steel at elevated temperatures**
GÜLER ÖZGÜL H., ERTAN R., Ozcan R.
MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES MICROSTRUCTURE AND PROCESSING, vol.578, pp.417-421, 2013 (SCI-Expanded)
- XVII. **Effect of Plasma Nitriding Parameters on the Wear Behaviour of AISI D6 Tool Steel**
Korkmaz E. E., Bayram A., ERTAN R., YAVUZ N.
MATERIALS TESTING, vol.55, no.6, pp.455-461, 2013 (SCI-Expanded)
- XVIII. **Effects of Welding Parameters on the Mechanical Properties of Inert Gas Welded 6063 Aluminum**

Alloys

Ertan T., Ertan R., UĞUZ A.

MATERIALS TESTING, vol.54, no.1, pp.13-18, 2012 (SCI-Expanded)

XIX. Influence of Heat Treatment Parameters on the Microstructure and Mechanical Properties of Boron-Alloyed Steels

GÜLER ÖZGÜL H., ERTAN R., Ozcan R.

MATERIALS TESTING, vol.54, no.9, pp.619-624, 2012 (SCI-Expanded)

XX. Optimisation of GTAW Parameters for the Tensile Strength of AISI 304 Stainless Steel Welds Using the Taguchi Method

Ertan R.

MATERIALS TESTING, vol.54, no.3, pp.163-168, 2012 (SCI-Expanded)

XXI. The effects of graphite, coke and ZnS on the tribological and surface characteristics of automotive brake friction materials

ERTAN R., YAVUZ N.

INDUSTRIAL LUBRICATION AND TRIBOLOGY, vol.63, no.4, pp.245-253, 2011 (SCI-Expanded)

XXII. An experimental study on the effects of manufacturing parameters on the tribological properties of brake lining materials

ERTAN R., YAVUZ N.

WEAR, vol.268, pp.1524-1532, 2010 (SCI-Expanded)

XXIII. Optimisation of brake friction material on tribological characteristics and cost using constrained mixture design method

ERTAN R., YAVUZ N.

INTERNATIONAL JOURNAL OF MATERIALS & PRODUCT TECHNOLOGY, vol.39, pp.271-290, 2010 (SCI-Expanded)

XXIV. Validation of analytical model of vehicle brake system

Guner R., Yavuz N., Kopmaz O., Ozturk F.

INTERNATIONAL JOURNAL OF VEHICLE DESIGN, vol.35, no.4, pp.331-348, 2004 (SCI-Expanded)

Articles Published in Other Journals

I. Investigation of the Welding Capability of Aluminum and Titanium Alloy Sheets with IF Steel Sheets by Resistance Spot Welding Method

Mutlusu O., ERTAN R.

JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.23, no.4, pp.1003-1013, 2020 (ESCI)

II. ÜÇ BOYUTLU DOKUMA KUMAŞ TAKVİYELİ SANDVIÇ KOMPOZİTLERDE YÜZEYLERDEKİ ELYAF KATMAN SAYISININ EĞİLME DAVRANIŞINA ETKİSİ

ERTAN R., KUŞ A., durgun i.

Uludağ University Journal of The Faculty of Engineering, vol.24, no.3, pp.231-240, 2019 (Peer-Reviewed Journal)

III. Direnç Nokta Kaynağı ile Birleştirilen Yeni Nesil Çeliklerde Kaynak Akımının Mekanik Özelliklere Etkisi

ERTAN R., Aras S., GÜLER H.

Afyon Kocatepe Üniversitesi Fen Ve Mühendislik Bilimleri Dergisi, vol.19, no.2, pp.461-469, 2019 (Peer-Reviewed Journal)

IV. Investigation of mechanical properties of high strength steel welded by resistance spot welding

Aras S., ERTAN R., GÜLER ÖZGÜL H.

PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGISI, vol.24, no.1, pp.63-68, 2018 (ESCI)

V. BALATA MALZEMELERİNDE KULLANILAN YAPISALLARIN BALATANIN TRİBOLOJİK VE FİZİKSEL ÖZELLİKLERİNE ETKİSİ

ERTAN R., YAVUZ N.

Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.15, no.1, pp.169-177, 2010 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Effect Of Temperature On The Formability Of Pure (CP2) Titanium Material**
Gökmen Ş., ERTAN R., GÜLER ÖZGÜL H.
7. INTERNATIONAL SCIENCES AND INNOVATION CONGRESS, Ankara, Turkey, 03 June 2023
- II. **Investigation Of The Mechanical Properties Of Reduced Graphen Oxide Reinforced Chloroprene Rubber Composite Material**
Özgül H., Yılmaz E., Yılmaz M., ERTAN R.
7. INTERNATIONAL SCIENCES AND INNOVATION CONGRESS, Ankara, Turkey, 03 June 2023
- III. **CASE STUDY ON SIMULATION-BASED DESIGN AND TRY-OUT OF FORMING TOOLS**
Coşkun S., ERTAN R., Erdoğan M.
ULUSLARARASI MALZEME MÜHENDİSLİĞİ VE İLERİ İMALAT TEKNOLOJİLERİ KONGRESİ (IMEAMTC'23), İstanbul, Turkey, 12 January 2023
- IV. **Hybrid Quenching Method for Hot Stamping Prototype Process**
Sevilgen G., Ertan R., Bulut E., Öztürk F., Eşiyok F., Alyay İ., Abi T. T.
10th International Automotive Technologies Congress (OTEKON 2020), Bursa, Turkey, 6 - 07 September 2021, pp.649-658
- V. **OBTAINING HEMATITE FROM DOMESTIC SCALE (IRON OXIDE) AND SYNTHESISE IT WITH STRONTIUM CARBONATE AND PRODUCE STRONTIUM HEXAFERRITE BASED FERRITIC MAGNET POWDER**
Kurtuluş O. U., ERTAN R.
Otekon 2020-Proceedings of the International 10th Automotive Technologies Congress, Bursa, Turkey, 6 - 07 September 2021, pp.1675-1682
- VI. **The Effect of Spray Parameters on The Cooling Rate of High Strength Steel 22MnB5**
Sevilgen G., Ertan R., Bulut E., Öztürk F., Eşiyok F., Alyay İ., Abi T. T.
10th International Automotive Technologies Congress (OTEKON 2020), Bursa, Turkey, 6 - 07 September 2021, pp.659-667
- VII. **Investigation of Resistance Spot Weldability of Titanium Alloy with Aluminum Alloy**
Şentürken B., ERTAN R.
TOKYO SUMMIT-2 International Conference on Innovative Studies, Tokyo, Japan, 17 - 19 August 2020, pp.120-125
- VIII. **OPTIMIZATION OF RESISTANCE SPOT WELDING PARAMETERS WITH USING FACTORIAL DESIGN APPROACH**
iş u., ERTAN R., TEKİN M.
otekon 2018, 7 - 08 May 2018
- IX. **INVESTIGATION OF THE VEHICLE PASSENGER SEATS LEGS PERFORMANCE BY USING THE FINITE ELEMENT METHODS**
düvenci f., ERTAN R., çetin g.
otekon 2018, Bursa, Turkey, 7 - 08 May 2018
- X. **The effect of fabrication processes and material combinations on the mechanical properties of fibre reinforced polymer composites**
ERTAN R.
The IRES Conference/61st International conferences on Engineering and Natural Science, Barselona, Spain, 19 June 2016, pp.1-4
- XI. **Farklı Çeliklerin Kaynağında Isıl İşlemlerin Mekanik Özellikler Üzerindeki Etkisi**
Kalmaz K., Hırsava U., Kiraz A. T., ERTAN R., GÜLER H.
OTEKON 2016, 8. Otomotiv Teknolojileri Kongresi, Bursa, Turkey, 23 - 24 May 2016
- XII. **A new automated system approach and improvements in Vibratory Mass Finishing Process**
Emir B., Ertan R.
The IRES 17th International Conference, London, United Kingdom, 21 - 22 November 2015
- XIII. **30MnB5 Çelik Malzemenin Kırılma Enerjisi Ve Dayanım Değerlerine Isıl İşlem Sıcaklıklarının Etkisi**
GÜLER H., ERTAN R., ÖZER H.

Otomotiv Teknolojileri Kongresi (2014), Bursa, Turkey, 26 - 27 May 2014

XIV. Otomotiv Mühendisliği Laboratuvarı Projesi

SEVİLGEN G., KARAMANGİL M. İ., ERKUŞ B., SOLMAZ E., ERTAN R., KAMIŞ KOCABIÇAK Z., YAZICI M., ÖZTÜRK F., ŞENDOĞAN Ö., BERK Ö.

Uludağ Üniversitesi Bilgilendirme ve AR-GE Günleri, Turkey, 13 - 15 November 2012

Supported Projects

Sevilgen G., Kılıç M., Etemoğlu A. B., Karpat F., Kaya N., Sürmen A., Karamangil M. İ., Kuş A., Çavdur F., Cindoruk S. S., et al, TUBITAK Project, TÜBİTAK 1004 (Mükemmeliyet Merkezi Destek Programı) Elektrikli Taşıtlar İçin Batarya Teknolojileri Araştırma ve Geliştirme Platformu (BATEG), 2022 - 2026

ERTAN R., Project Supported by Higher Education Institutions, Titanyum alaşımlarının şekillendirme parametrelerinin optimizasyonu, 2015 - 2022

Öztürk F., Sevilgen G., Ertan R., TUBITAK Project, TÜBİTAK 1501 Sıcak şekillendirme prosesine hibrit soğutma tekniğinin adaptasyonu ve parça karakteristiklerinin optimizasyonu, 2018 - 2021

ERTAN R., ENSARİOĞLU C., Project Supported by Higher Education Institutions, Alüminyum Köpük Alaşımlarında İkincil Fazların Tespiti ve Malzemenin İşlenebilirliğine Etkilerinin İncelenmesi, 2013 - 2018

ERTAN R., Project Supported by Higher Education Institutions, Alüminyum-Magnezyum Sac Malzemelerin Sürtünme Karıştırma Nokta Kaynağı Metoduyla Kaynak Edilebilirliğinin İncelenmesi ve Optimizasyonu, 2013 - 2018

ERTAN R., ENSARİOĞLU C., Project Supported by Higher Education Institutions, Alaşım Elementlerinin ve Üretim Parametrelerinin Toz Metalürjisi Yöntemi ile Üretilen Alüminyum Esaslı Köpüklerin İşlenebilirliğine ve Fiziksel Özelliklerine Etkilerinin İncelenmesi, 2011 - 2018

GÜLER ÖZGÜL H., ERTAN R., Project Supported by Higher Education Institutions, Sıcak Şekillendirme İşleminde Kullanılan Yüksek Mukavemetli Çelik Sacların Yüksek Sıcaklıktaki Mekanik Özelliklerinin Belirlenmesi ve Şekillendirme Simülasyonlarının Yapılması, 2011 - 2016

Metrics

Publication: 44

Citation (WoS): 555

Citation (Scopus): 646

H-Index (WoS): 8

H-Index (Scopus): 8

Non Academic Experience

Uludağ üniversitesi