

## Prof. RUKİYE ERTAN

### Personal Information

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### International Researcher IDs

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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 (Yıl) (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 alloyls, Postgraduate, S.Sevinc(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 passanger 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. 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 ODKRIVNOSTI OD RAZLIČNIH PARAMETROV VARJENJA  
Aras S., ERTAN R.  
Materiali in Tehnologije, vol.58, no.2, pp.121-127, 2024 (SCI-Expanded)
- II. 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)
- III. 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)
- IV. Forming evolution of titanium grade2 sheets  
TEKİN M., ERTAN R., Özgül H. G.  
Materialprüfung/Materials Testing, vol.64, no.1, pp.116-124, 2022 (SCI-Expanded)
- V. 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)
- VI. 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)
- VII. 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)
- VIII. Mechanical properties of dissimilar Ti-Al resistance spot welds  
ERTAN R.  
MATERIALS TESTING, vol.62, no.6, pp.597-602, 2020 (SCI-Expanded)
- IX. Shunting effects on the resistance spot welding parameters of DP600  
Aydin E., Ertan R.  
MATERIALS TESTING, vol.62, pp.97-103, 2020 (SCI-Expanded)
- X. 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)
- XI. 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)
- XII. 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)
- XIII. 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)
- XIV. 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)
- XV. 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)
- XVI. 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)
- XVII. 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)
- XVIII. 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)

- XIX. 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)
- XX. 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)
- XXI. 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)
- XXII. 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)
- XXIII. 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-POLITEKNIK DERGİSİ, vol.23, no.4, pp.1003-1013, 2020 (ESCI)
- II. ÜÇ BOYUTLU DOKUMA KUMAŞ TAKVİYELİ SANDVİÇ 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 UNIVERSITESI MUHENDISLIK BİLİMLERİ DERGİSİ, 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  
 Gökmən 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., Erdogan 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., ENSARIOĞLU 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., ENSARIOĞLU C., Project Supported by Higher Education Institutions, Alaşım Elementlerinin ve Üretim Parametrelerinin Toz Metalürjisi Yöntemi ile Üretilcek Alüminyum Esash 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: 43

Citation (WoS): 493

Citation (Scopus): 573

H-Index (WoS): 8

H-Index (Scopus): 8

## **Non Academic Experience**

Uludağ üniversitesi