

Prof. TAHSİN BOYRAZ

Personal Information

Office Phone: [+90 346 487 2250](tel:+903464872250)

Email: tahsinboyraz@cumhuriyet.edu.tr

Web: <https://avesis.cumhuriyet.edu.tr/tahsinboyraz>

International Researcher IDs

ScholarID: OkztoFkAAAAJ

ORCID: 0000-0003-4404-6388

Publons / Web Of Science ResearcherID: D-8897-2016

ScopusID: 6507780911

Yoksis Researcher ID: 25258

Education Information

Doctorate, Istanbul Technical University, Kimya-Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, Turkey
1998 - 2008

Postgraduate, Sakarya University, Faculty Of Engineering, Department Of Metallurgical And Materials Engineering,
Turkey 1996 - 1998

Undergraduate, Istanbul Technical University, Kimya-Metalurji Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü,
Turkey 1988 - 1994

Certificates, Courses and Trainings

Occupational Health and Safety, İşyeri Hekimliği ve İş Güvenliği Uzmanlığı Eğitici Belgesi, , T.C. Çalışma ve Sosyal Güvenlik
Bakanlığı, İş Sağlığı ve Güvenliği Genel Müdürlüğü., 2013

Dissertations

Doctorate, Farklı yöntemlerle şekillendirilmiş CaO/MgO katkılı stabilize edilmiş ZrO₂ esaslı seramiklerin fiziksel ve
elektriksel özelliklerinin incelenmesi, İstanbul Teknik Üniversitesi, Kimya-Metalurji Fakültesi, Metalurji Ve Malzeme
Mühendisliği Bölümü, 2008

Postgraduate, Diş porselen tozları, Sakarya Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği
Bölümü, 1998

Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Engineering and Technology

Academic Titles / Tasks

Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Metalürji Mühendisliği, 2024 - Continues

Associate Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Metalürji Mühendisliği, 2019 - 2024

Assistant Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Metalürji Mühendisliği, 2009 - 2019
Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, Metalürji Mühendisliği, 2008 - 2009
Research Assistant, Istanbul Technical University, Kimya-Metalurji, Metalurji Ve Malzeme Mühendisliği, 1998 - 2008
Research Assistant, Sivas Cumhuriyet University, Mühendislik Fakültesi, Metalürji Mühendisliği, 1994 - 1998

Academic and Administrative Experience

Sivas Cumhuriyet Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, 2013 - 2015
Sivas Cumhuriyet Üniversitesi, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, 2010 - 2015

Courses

İleri Teknoloji malzemeler, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Cam ve Cam Seramikler, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016
Phase Diagrams, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Balistik Malzemeler ve Zırh Teknolojileri, Doctorate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022
Katı Oksit Yakıt Hücreleri İçin Seramik Malzemeler, Doctorate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Glass Technology, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
Bitirme Ödevi, Undergraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015
İleri Seramik Üretimi ve Teknolojisi, Postgraduate, 2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021
Seramik Malzemeler, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Seramik Laboratuvarı, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Toz Metalurjisi ve Uygulamaları, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019
Uzmanlık Alan Dersi, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
Toz Metalurjisi, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
seramik Sensör Malzemeler, Postgraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021
Seminer Dersi, Doctorate, 2020 - 2021
Seminer Dersi, Postgraduate, 2020 - 2021
Refrakterler ve Endüstriyel Fırınlar, Undergraduate, 2020 - 2021
Nano Malzemeler ve Nano Teknolojisi, Postgraduate, 2015 - 2016
Mukavemet, Undergraduate, 2013 - 2014
Metalurji Mühendisliği Projesi II, Undergraduate, 2013 - 2014
Statik ve Mukavemet, Undergraduate, 2013 - 2014
Metalurji Termodinamiği I, Undergraduate, 2012 - 2013
Nano Malzemeler, Undergraduate, 2012 - 2013
Nano Malzemeler, Undergraduate, 2012 - 2013
Metalurji Mühendisliği Projesi I, Undergraduate, 2013 - 2014
Metalurji Termodinamiği II, Undergraduate, 2012 - 2013
Döküm Prensipleri, Undergraduate, 2011 - 2012
Metalurji Ve Malzeme Müh. Giriş, Undergraduate, 2012 - 2013
Teknik Resim, Undergraduate, 2011 - 2012
Malzeme Analiz Teknikleri, Undergraduate, 2011 - 2012
Metalurjik Atıklar ve Çevre, Undergraduate, 2010 - 2011

Üretim Metalurjisi Laboratuvarı II, Undergraduate, 2010 - 2011

Metalurji Ve Malzeme Müh. Giriş, Undergraduate, 2009 - 2010

Advising Theses

Boyras T., Sivas-Yıldızeli yöresi vermikülit hammaddesinin seramik sektöründe kullanımının araştırılması, Postgraduate, Ş.TAPİK(Student), 2019

BOYRAZ T., Alüminyum titanat katkılı porselenlerin üretilmesi ve karakterizasyonu, Postgraduate, M.SAÇLI(Student), 2014

BOYRAZ T., Alüminyum titanat/YSZ dental seramiklerin üretilmesi ve karakterizasyonu, Postgraduate, E.ÇITAK(Student), 2014

BOYRAZ T., Alüminyum titanat/spinel seramik kompozitlerin üretilmesi ve karakterizasyonu, Postgraduate, U.ÖNEN(Student), 2013

Jury Memberships

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Sivas Cumhuriyet Üniversitesi, September, 2022

Post Graduate, Post Graduate, Fırat Üniversitesi, June, 2022

Post Graduate, Post Graduate, Fırat Üniversitesi, May, 2022

Doctorate, Doctorate, Sivas Cumhuriyet Üniversitesi, September, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Sivas Cumhuriyet Üniversitesi, September, 2021

Post Graduate, Post Graduate, Sivas Cumhuriyet Üniversitesi, August, 2021

Post Graduate, Post Graduate, Fırat Üniversitesi, June, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Sivas Cumhuriyet Üniversitesi, June, 2021

Post Graduate, Post Graduate, Fırat Üniversitesi, October, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Sivas Cumhuriyet Üniversitesi, June, 2019

Post Graduate, Post Graduate, Bursa Teknik Üniversitesi, June, 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Prediction of wear properties of CaO and MgO doped stabilized zirconia ceramics produced with different pressing methods using adaptive neuro fuzzy inference systems Vorhersage der Verschleißseigenschaften von CaO- und MgO-dotierten stabilisierten Zirkonoxidkeramiken, die mit verschiedenen Pressmethoden unter Verwendung adaptiver Neuro-Fuzzy-Inferenzsysteme hergestellt wurden**
Yüksek A. G., Boyraz T., Akkuş A.
Materialwissenschaft und Werkstofftechnik, vol.55, no.9, pp.1227-1237, 2024 (SCI-Expanded)
- II. **Correlation between bending strength and porosity in vermiculite added ceramic bodies**
Önen U., BOYRAZ T.
Journal of Ceramic Processing Research, vol.25, no.4, pp.624-632, 2024 (SCI-Expanded)
- III. **Prediction of Wear Properties of CaO and MgO Doped Stabilized Zirconia Ceramics with Artificial Neural Networks**
YÜKSEK A. G., BOYRAZ T., AKKUŞ A.
Transactions of the Indian Ceramic Society, vol.83, no.3, pp.188-198, 2024 (SCI-Expanded)

- IV. **Investigation of wear properties of mullite and aluminium titanate added porcelain ceramics**
Boyraz T., AKKUŞ A.
JOURNAL OF CERAMIC PROCESSING RESEARCH, vol.22, no.2, pp.226-231, 2021 (SCI-Expanded)
- V. **Structural and mechanical characterization of mullite and aluminium titanate reinforced yttria stabilized zirconia ceramic composites**
Kucuk I., BOYRAZ T.
JOURNAL OF CERAMIC PROCESSING RESEARCH, vol.20, no.1, pp.73-79, 2019 (SCI-Expanded)
- VI. **Fabrication and characterization of aluminium titanate and mullite added Porcelain ceramics**
AKKUŞ A., BOYRAZ T.
JOURNAL OF CERAMIC PROCESSING RESEARCH, vol.20, no.1, pp.54-58, 2019 (SCI-Expanded)
- VII. **Investigation of wear properties of CaO, MgO added stabilized zirconia ceramics produced by different pressing methods**
AKKUŞ A., BOYRAZ T.
JOURNAL OF CERAMIC PROCESSING RESEARCH, vol.19, no.3, pp.249-252, 2018 (SCI-Expanded)
- VIII. **Thermomechanical properties of aluminium titanate (Al₂TiO₅)-reinforced forsterite (Mg₂SiO₄) ceramic composites**
Kucuk I., BOYRAZ T., Gokce H., Öveçoğlu M. L.
CERAMICS INTERNATIONAL, vol.44, no.7, pp.8277-8282, 2018 (SCI-Expanded)
- IX. **Microstructural characterization and thermal properties of aluminium titanate/talc ceramic matrix composites**
Ozsoy E., Onen U., Boyraz T.
Acta Physica Polonica A, vol.127, no.4, pp.1136-1138, 2015 (SCI-Expanded)
- X. **Microstructural characterization and thermal properties of aluminium titanate/porcelain ceramic matrix composites**
Sacli M., Onen U., Boyraz T.
Acta Physica Polonica A, vol.127, no.4, pp.1133-1135, 2015 (SCI-Expanded)
- XI. **Microstructural Characterization and Thermal Properties of Aluminium Titanate/YSZ Ceramics**
Citak E., Boyraz T.
ACTA PHYSICA POLONICA A, vol.125, no.2, pp.465-468, 2014 (SCI-Expanded)
- XII. **Microstructural Characterization and Thermal Properties of Aluminium Titanate/Spinel Ceramic Matrix Composites**
Onen U., Boyraz T.
ACTA PHYSICA POLONICA A, vol.125, no.2, pp.488-490, 2014 (SCI-Expanded)
- XIII. **Microstructural and mechanical properties of hot-pressed (B₄C, SiC)/TiB₂ Composites**
Akarsu A. C., Gökfe H., Ertug B., Addemir A. O., Övejoğlu M. L., Boyraz T.
CFI Ceramic Forum International, vol.89, 2012 (SCI-Expanded)
- XIV. **INVESTIGATION OF THE ELECTRICAL CONDUCTIVITY AND HUMIDITY SENSITIVITY CHARACTERISTICS OF BaTiO₃ CERAMICS WITH PMMA ADDITIVE**
Ertug B., Boyraz T., Addemir O.
ARCHIVES OF METALLURGY AND MATERIALS, vol.57, no.2, pp.437-442, 2012 (SCI-Expanded)
- XV. **Characterization of microstructural and thermal properties of steatite/cordierite ceramics prepared by using natural raw materials**
Gokce H., Ağaoğulları D., Öveçoğlu M. L., Duman I., Boyraz T.
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.31, no.14, pp.2741-2747, 2011 (SCI-Expanded)
- XVI. **Humidity sensitivity characteristics of BaTiO₃ ceramics with PMMA additive at various working temperatures**
Ertug B., BOYRAZ T., Addemir O.
JOURNAL OF CERAMIC PROCESSING RESEARCH, vol.11, no.4, pp.443-447, 2010 (SCI-Expanded)
- XVII. **Microstructural aspects of the hot-pressed hexagonal boron nitride ceramics with limited content of boron oxide**
Boyraz T., Ertuğ B., Addemir A. O.

- MATERIALS SCIENCE FORUM, vol.554, pp.197-200, 2007 (SCI-Expanded)
- XVIII. **An investigation of the mechanical properties and fracture characteristic of hot-pressed boron nitride ceramics**
Boyraz T., Ertuğ B., Addemir A. O.
MATERIALS SCIENCE FORUM, vol.554, pp.201-204, 2007 (SCI-Expanded)
- XIX. **Investigation of thermal stresses in dental restoration by mathematical method**
Haskan H., Boyraz T., Kilicarslan M. A.
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.27, pp.899-902, 2007 (SCI-Expanded)
- XX. **The characterization of metal-ceramic interfaces in porcelain teeth**
Boyraz T., Kilic A., Ertug B., Tavsanoglu T., Karakas Y., Addemir O.
EURO CERAMICS VIII, PTS 1-3, pp.683-686, 2004 (SCI-Expanded)

Articles Published in Other Journals

- I. **The Relationship Between Bending Strength and Porosity in Ceramic Brick That Contains Vermiculite**
Boyraz T., Önen U.
International Journal of Engineering Science Technologies, vol.8, no.3, pp.47-57, 2024 (Peer-Reviewed Journal)
- II. **Prediction of Wear Properties of Experimental Produced Porcelain Ceramics Using Artificial Neural Networks (ANN)**
Yüksek A. G., Boyraz T., Akkuş A.
Sivas Cumhuriyet Üniversitesi Mühendislik Fakültesi Dergisi, vol.1, no.2, pp.66-74, 2023 (Peer-Reviewed Journal)
- III. **Regression Modelling to Study Wear Properties of Experimental Produced Porcelain Ceramics**
YÜKSEK A. G., BOYRAZ T., AKKUŞ A.
Teknik Meslek Yüksekokulları Akademik Araştırma Dergisi, vol.2, no.2, 2023 (Peer-Reviewed Journal)
- IV. **Investigation Of The Effect Of Vermiculite (Yıldızeli/Sivas) Addition On The Properties Of Sanitaryware Ceramic**
BOYRAZ T., ÖNEN U., TAPİK Ş.
Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi (Online), vol.5, no.2, pp.632-642, 2022 (Peer-Reviewed Journal)
- V. **The effect of mullite addition on wear properties of titania doped zirconia ceramics**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, vol.12, no.1, pp.43-50, 2022 (Peer-Reviewed Journal)
- VI. **Fabrication and Characterization of Mullite Reinforced CeO₂ Added ZrO₂ Ceramics**
HAFIZOĞLU M. A., AKKUŞ A., BOYRAZ T.
Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi (Online), vol.22, no.5, pp.262-274, 2022 (Peer-Reviewed Journal)
- VII. **The Effect of Mullite Addition on Wear Properties of SiO₂ Doped ZrO₂ Ceramics**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
CUMHURİYET SCIENCE JOURNAL, vol.43, no.2, pp.257-265, 2022 (Peer-Reviewed Journal)
- VIII. **Fabrication and Characterization of Mullite Reinforced Y₂O₃ Added ZrO₂ Ceramics**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
Open Journal of Nano, vol.6, no.2, pp.28-40, 2021 (Peer-Reviewed Journal)
- IX. **Fabrication and Characterization of Mullite Reinforced MgO Added ZrO₂ Ceramics**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
European Journal of Science and Technology, no.28, 2021 (Peer-Reviewed Journal)
- X. **Fabrication and Characterization of Mullite Reinforced CaO Added ZrO₂ Ceramics**
HAFIZOĞLU M. A., AKKUŞ A., BOYRAZ T.
European Journal of Science and Technology, no.28, pp.1137-1143, 2021 (Peer-Reviewed Journal)
- XI. **Vermikülit (Yıldızeli/ Sivas) İlavesinin Seramik Porselenin Özellikleri Üzerinde Etkisinin Araştırılması**

- TAPİK Ş., ÖNEN U., BOYRAZ T.
AKU J. Sci. Eng., no.19, pp.513-520, 2019 (Peer-Reviewed Journal)
- XII. **RADIATION ATTENUATION PROPERTIES OF ALUMINUM TITANATE-SPINEL COMPOSITES FOR CO-60 GAMMA SOURCE**
Görkem Ç., TUĞRUL A. B., ÖNEN U., BOYRAZ T., BÜYÜK B.
Materials Methods and Technologies, no.13, pp.145-152, 2019 (Peer-Reviewed Journal)
- XIII. **Radiation Attenuation Properties Of Aluminum Titanate-Spinel, Composites For Co-60 Gamma Source**
ÇEVİKBAŞ G., TUĞRUL A. B., ÖNEN U., BOYRAZ T., BÜYÜK B.
Materials, Methods Technologies, no.13, pp.145-152, 2019 (Peer-Reviewed Journal)
- XIV. **Thermal Properties and Microstructural Characterization of Aluminium Titanate (Al₂TiO₅) / La₂O₃ - Stabilized Zirconia (ZrO₂) Ceramics**
BOYRAZ T.
Cumhuriyet Science Journal, vol.39, no.1, pp.243-249, 2018 (Peer-Reviewed Journal)
- XV. **Investigation of Thermal Stress In Different Metal Based Dental Restorations By Mathematical Analysis**
COŞKUN M. E., BOYRAZ T., TUĞUT F., AKIN H.
cumhuriyet dental journal, vol.18, no.4, pp.311-317, 2015 (Scopus)
- XVI. **An investigation of aluminum titanate spinel composites behavior in radiation**
ÇEVİKBAŞ G., TUĞRUL A. S. B., ÖNEN U., BOYRAZ T., BÜYÜK B.
AIP Conference Proceedings, vol.1653, pp.20029, 2015 (Scopus)
- XVII. **Investigation of thermal stress in different metal-ceramic restorations by mathematical analysis**
COŞKUN M. E., BOYRAZ T., TUĞUT F., AKIN H.
Cumhuriyet Dental Journal, vol.18, no.4, pp.311-317, 2015 (Scopus)
- XVIII. **Dental Restorasyonlarda (Kaplama, Dolgu, Kuron) Kullanılan Ticari Lityum Disilikat Cam-Seramiklerinin Üretimi ve Karakterizasyonu**
ERTUĞ B., SADULLAHOĞLU G., BOYRAZ T.
Metal Dünyası, no.235, 2013 (Peer-Reviewed Journal)
- XIX. **Response time and stability characteristics of pmma-containing barium titanate sensors**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
Special Topics Reviews in Porous Media, vol.3, no.3, pp.271-280, 2012 (Scopus)
- XX. **The Characterization of The Mechanical And Thermal Properties Of Hot Pressed Hexagonal Boron Nitride Titanium Diboride Composites**
AKARSU A. C., GÖKÇE H., BOYRAZ T., ERTUĞ B., SADULLAHOĞLU G., ADDEMİR A. O., ÖVEÇOĞLU M. L.
Journal of Trends Chemistry, vol.3, no.1, pp.6-11, 2012 (Peer-Reviewed Journal)
- XXI. **Sıcak Şekillendirilmiş ZrO₂ Seramiklerde Bağlayıcı Giderme ve Karakterizasyon**
BOYRAZ T., ADDEMİR O.
İTÜ dergisi/d, vol.9, no.2, 2010 (Peer-Reviewed Journal)
- XXII. **Effects of B₄C addition on the microstructural and thermal properties of hot pressed SiC ceramic matrix composites**
KEÇELİ Z., ÖĞÜNÇ H., BOYRAZ T., GÖKÇE H., ADDEMİR A. O., ÖVEÇOĞLU M. L.
Journal of Achievements in materials and manufacturing Engineering, vol.37, no.2, 2009 (Scopus)
- XXIII. **Bor Nitrür Tozlarının Üretim Yöntemleri ve Uygulama Alanları**
ERTUĞ B., BOYRAZ T.
Metal Dünyası, 2003 (Peer-Reviewed Journal)
- XXIV. **SİVAS KİREÇ FABRİKASINA YÖNELİK ALTERNATİF HAMMADDEKAYNAKLARININ DEĞERLENDİRİLMESİ**
SÜL Ö. L., KAHRİMAN A., DEMİRCİ A., CEBECİ Y., BOYRAZ T.
Madencilik, vol.35, no.2, pp.41-46, 1996 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **COMPARISON OF RANDOM FOREST AND ARTIFICIAL NEURAL NETWORKS FOR PREDICTIVE MODELLING OF DEBINDING BEHAVIOUR OF PRESSURELESS HOT FORMED ZIRCONIA CERAMICS**
Yüksek A. G., Boyraz T.
in: Research and Findings in Engineering Sciences-2024, BOZKURT ÖMER YAVUZ, ERGÜL ENGİN, Editor, Livre de Lyon, Lyon, pp.67-88, 2024
- II. **PREDICTIVE MODELLING OF WEAR PROPERTIES OF CAO AND MGO DOPED STABILIZED ZIRCONIA CERAMICS WITH DIFFERENT MACHINE LEARNING ALGORITHMS**
Yüksek A. G., Boyraz T., Akkuş A.
in: Modern Research in Engineering Sciences-2024, Halil İbrahim Kurt, Duygu Kavak, Editor, Livre de Lyon, Lyon, pp.1-33, 2024
- III. **Mathematical Thermal Stress Analysis in Metal-Ceramic and Ceramic-Ceramic Coatings**
Boyraz T.
in: POPULAR APPROACHES TO ENGINEERING, Mehmet Sait CENGİZ, Editor, Duvar yayınları, İzmir, pp.47-62, 2024
- IV. **Adaptive Neuro Fuzzy Inference Systems (ANFIS) and Application to Wear Prediction of Porcelain Ceramics**
Boyraz T.
in: POPULAR APPROACHES TO ENGINEERING, Mehmet Sait CENGİZ, Editor, Duvar Yayınları, İzmir, pp.23-46, 2024

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Wear Properties of Mullite-Alumina-Zirconia Ceramics**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
Ege 10th International Conference on Applied Sciences, İzmir, Turkey, 20 - 22 December 2023
- II. **Prediction of Wear Properties of Experimental Produced Porcelain Ceramics Using Support Vector Machine (SVM)**
BOYRAZ T., YÜKSEK A. G., TOPÇU A., AKKUŞ A.
V. Baskent International Conference on Multidisciplinary Studies, Ankara, Turkey, 21 - 22 December 2023
- III. **Prediction of Wear Properties of CaO and MgO Doped Stabilized Zirconia Ceramics With Gaussian Process Regression (GPR)**
YÜKSEK A. G., BOYRAZ T., KARTAL A., AKKUŞ A.
12th International Congress On Engineering Architecture and Design, İstanbul, Turkey, 23 - 25 December 2023, vol.1
- IV. **Investigation of Wear Properties of Mullite-Magnesia-Zirconia Ceramics**
HAFIZOĞLU M. A., AKKUŞ A., BOYRAZ T.
12. EUROASIA(International Congress on Scientific Research and Recent Trends-XII), Ankara, Turkey, 29 - 30 November 2023
- V. **Investigation of Wear Properties of Mullite-Yttria-Zirconia Ceramics**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
12. EUROASIA(International Congress on Scientific Research and Recent Trends-XII), Ankara, Turkey, 29 - 30 November 2023
- VI. **Investigation of Wear Properties of Mullite-Ceria-Zirconia Ceramics**
HAFIZOĞLU M. A., AKKUŞ A., BOYRAZ T.
V. International Cappadocia Scientific Research Congress, Nevşehir, Turkey, 5 - 07 November 2023
- VII. **Fabrication, Characterization and Wear Properties of Mullite Reinforced Silica-Doped Zirconia Ceramic Composites**
HAFIZOĞLU M. A., BOYRAZ T., AKKUŞ A.
4. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'21), Nevşehir, Turkey, 28 - 30 May 2021, pp.175-180

- VIII. **Investigation of The Effect of Vermiculite (Yıldızeli/Sivas) Addition on The Properties of Ceramic Floor Tiles**
BOYRAZ T., ÖNEN U., TAPİK Ş.
4. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC'21), Nevşehir, Turkey, 28 - 30 May 2021
- IX. **Investigation of The Effect of Vermiculite (Yıldızeli/Sivas) Addition on The Properties of Ceramic Brick**
BOYRAZ T., ÖNEN U., TAPİK Ş.
Global Conference on Engineering Research (GLOBECER'21), Bandırma, 2 - 05 June 2021
- X. **Fabrication, Characterization and Wear Properties of Mullite Reinforced Al₂O₃-Doped ZrO₂ Ceramic Composites**
Hafizoğlu M. A., Akkuş A., Boyraz T.
1nd. Global Conference on Engineering Research (GLOBECER'21), Balıkesir, Turkey, 2 - 05 June 2021, pp.673-682
- XI. **Radiation Attenuation Properties Of Aluminum Titanate-Spinel Composites For Co-60 Gamma Source**
Görkem Ç., TUĞRUL A. B., ÖNEN U., BOYRAZ T., BÜYÜK B.
21st International Conference Materials, Methods Technologies, Burgas, Bulgaria, 1 - 05 July 2019, pp.145-152
- XII. **An Investigation of Aluminum Titanate-Spinel Composites Behavior in Radiation**
Cevikbas G., Tugrul A. B., Onen U., Boyraz T., Buyuk B.
4th International Congress in Advances in Applied Physics and Materials Science (APMAS), Fethiye, Turkey, 24 - 27 April 2014, vol.1653
- XIII. **Microstructural Characterization and Thermal Properties of Aluminium Titanate/Talc Ceramic Matrix Composites**
ÖZSOY E., ÖNEN U., BOYRAZ T.
4th International Congress on Advances in Applied Physics and Materials Science (APMAS2014), 24 - 27 April 2014
- XIV. **An investigation of aluminum titanate-spinel composites behavior in radiation**
ÇEVİKBAŞ G., TUĞRUL A. B., ÖNEN U., BOYRAZ T., BÜYÜK B.
4th International Congress in Advances in Applied Physics and Materials Science, APMAS 2014, 24 - 27 April 2014
- XV. **Microstructural Characterization and Thermal Properties of Aluminium Titanate/Porcelain Ceramic Matrix Composites**
SAÇLI M., ÖNEN U., BOYRAZ T.
4th International Congress on Advances in Applied Physics and Materials Science (APMAS2014), 24 - 27 April 2014
- XVI. **An investigation of aluminum titanate-spinel composites behavior in radiation**
ÇEVİKBAŞ G., TUĞRUL A. B., ÖNEN U., BOYRAZ T., BÜYÜK B.
APMAS 2014, 24 - 27 April 2014
- XVII. **Microstructural Characterization and Thermal Properties of Aluminium Titanate /Spinel Ceramic Matrix Composites**
ÖNEN U., BOYRAZ T.
3rd International Advances in Applied Physics and Material Science Congress (APMAS 2013), 24 - 28 April 2013
- XVIII. **Farklı Metal Alt Yapılı Dental Restorasyonlarda Oluşan Termal Streslerin Matematiksel Yöntemle Değerlendirilmesi**
COŞKUN M. E., BOYRAZ T., TUĞUT F., AKIN H.
19. Ege Dişhekimleri Odaları Uluslararası Bilimsel Kongre ve Sergisi, Fethiye, Turkey, 26 - 28 April 2013
- XIX. **Microstructural Characterization and Thermal Properties of Aluminum Titanate/ YSZ Ceramics**
ÇITAK E., BOYRAZ T.
3rd International Advances in Applied Physics and Material Science Congress (APMAS 2013), 24 - 28 April 2013
- XX. **Alüminyum Titanat / Forsterit Seramiklerin Mikro Yapısal ve Fiziksel Karakterizasyonu**
KÜÇÜK İ., GÖKÇE H., BOYRAZ T., ÖVEÇOĞLU M. L.
15. Uluslararası Metalurji ve Malzeme Kongresi, 11 - 13 November 2010, pp.2210-2215
- XXI. **Characterization of Microstructural and Physical Properties of Y₂O₃ Reinforced Cordierite Based**

Ceramic Materials

GÖKÇE H., KÜÇÜK İ., BOYRAZ T., AĞAOĞULLARI D., DUMAN İ., ÖVEÇOĞLU M. L.

13. Uluslararası Malzeme Sempozyumuna (IMSP'xx2010, 13 - 15 October 2010

- XXII. **The Characterization of The Mechanical And Thermal Properties Of Hot-Pressed Hexagonal Boron Nitride-Titanium Diboride Composites**
AKARSU A. C., GÖKÇE H., BOYRAZ T., ERTUĞ B., ADDEMİR O., ÖVEÇOĞLU M. L.
3rd Int. Symposium on SiALONs and Non-Oxides, Nevşehir, Turkey, 01 June 2010
- XXIII. **PMMA Katkılı BaTiO₃ Esaslı Nem Sensörlerinde Tepki Hızı Karakteristiklerinin İncelenmesi**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
VII. Uluslararası Katılımlı Seramik Kongresi, Turkey, 26 - 28 November 2008, pp.83-89
- XXIV. **B₄C Partikül Takviyesinin Sıcak Preslenmiş SiC Matrisli Seramik Kompozitlerin Mekanik Özellikleri Üzerindeki Etkisi**
ÖĞÜNÇ H., KEÇELİ Z., BOYRAZ T., ADDEMİR O., ÖVEÇOĞLU M. L.
14. Uluslararası Metalurji ve Malzeme Kongresi, 16 - 18 October 2008
- XXV. **La₃ Katkılı BaTiO₃ Bileşimlerinde Donör Katkısının Mikroyapısal Özellikler Üzerine Etkilerinin İncelenmesi**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
14. Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 16 - 18 October 2008, pp.1028-1033
- XXVI. **Alüminyum Titanat/Kordiyerit Seramiklerin Mekanik Özelliklerinin Karakterizasyonu**
GÖKÇE H., BOYRAZ T., KEÇELİ Z., ÖVEÇOĞLU M. L., ADDEMİR O.
14. Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 16 - 18 October 2008
- XXVII. **Yozgat - Kadisehir Demir Cevherinde Naa Tekniği ile Au, Pt, Ir iz Element Taraması**
AKARSU A. C., BOYRAZ T., ADDEMİR O.
14. Uluslararası Metalurji ve Malzeme Kongresi, İstanbul, Turkey, 16 - 18 October 2008, pp.533-542
- XXVIII. **Effects of B₄C Addition on the Microstructural and Thermal Properties of Hot Pressed SiC Ceramic Matrix Composites**
KEÇELİ Z., ÖĞÜNÇ H., GÖKÇE H., BOYRAZ T., ADDEMİR O., ÖVEÇOĞLU M. L.
12th International Materials Symposium, Denizli, Turkey, 15 - 17 October 2008, pp.386-392
- XXIX. **Thermal Shock Properties of Aluminium Titanate-Cordierite Ceramics Produced By PM Method**
GÖKÇE H., KEÇELİ Z., BOYRAZ T., HAMZAÇEBİ C., ÖVEÇOĞLU M. L.
5th international Powder Metallurgy Conference, 8 - 12 October 2008, pp.1218-1225
- XXX. **Humidity Sensing Properties of lanthanum Doped Barium Titanate Ionic Conductive Ceramic Sensor**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
5th international Powder Metallurgy Conference, 8 - 12 October 2008, pp.1123-1130
- XXXI. **Humidity Sensitivity and Microhardness Relationship of BaTiO₃ Ceramics with PMMA Additive**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
5th international Powder Metallurgy Conference, 8 - 12 October 2008, pp.1112-1122
- XXXII. **An Investigation On The Properties of nano TiB₂ Reinforced Hot Pressed B₄C-SiC composites**
AKARSU A. C., BOYRAZ T., ADDEMİR O.
2nd International World Congress On Ceramics, 29 June - 04 July 2008
- XXXIII. **Thermal Characterization of Aluminum Titanate/ Cordierite Ceramics**
GÖKÇE H., BOYRAZ T., KEÇELİ Z., ÖVEÇOĞLU M. L., ADDEMİR O.
2nd International World Congress On Ceramics, 29 June - 04 July 2008
- XXXIV. **Effects of B₄C Addition on the Microstructure and Mechanical Properties of Hot Pressed SiC Ceramic Matrix Composites**
ÖĞÜNÇ H., KEÇELİ Z., BOYRAZ T., ADDEMİR O., ÖVEÇOĞLU M. L.
2nd International World Congress On Ceramics, 29 June - 04 July 2008
- XXXV. **The Effects Of Sintering Conditions And La₂O₃ Dopant On The Sintering Behaviour And Grain Growth Of Barium Titanate Ceramics,**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
10th International Conference and Exhibition of the European Ceramic Society, 17 - 21 June 2007

- XXXVI. **Microstructural and Physical Characterization of Aluminium Titanate / Cordierite Ceramics**
GÖKÇE H., BOYRAZ T., KEÇELİ Z., ÖVEÇOĞLU M. L., ADDEMİR O.
10th International Conference and Exhibition of the European Ceramic Society, 17 - 21 June 2007
- XXXVII. **Numerical Simulation of the Ballistic Performance of B4C-SiC Ceramic Composites for Armor Applications**
KEÇELİ Z., TÜRKMEN H. S., BOYRAZ T., ADDEMİR O., ÖVEÇOĞLU M. L.
10th International Conference and Exhibition of the European Ceramic Society, 17 - 21 June 2007, pp.154-158
- XXXVIII. **Effect of Different Oxidation Temperatures and Firing Procedures on Titanium-Ceramic Bond Strength**
TUKAY A., ORUÇ S., ÖZDEMİR K., BALKAYA M. C., BOYRAZ T., AKYIL S., AKOVA T.
10th International Conference and Exhibition of the European Ceramic Society, 17 - 21 June 2007, pp.981-984
- XXXIX. **The Influence Of Pore-Forming Agents On The Microstructural Features Of La3-Doped BaTiO3 Ceramics**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
10th International Conference and Exhibition of the European Ceramic Society, 17 - 21 June 2007
- XL. **Microstructural aspects of the hot-pressed hexagonal boron nitride ceramics with limited content of boron oxide**
Ertug B., Boyraz T., Addemir O.
5th International Symposium on Nitrides, Eskişehir, Turkey, 3 - 05 April 2006, vol.554, pp.197-198
- XLI. **An investigation of the mechanical properties and fracture characteristic of hot-pressed boron nitride ceramics**
Ertug B., Boyraz T., Addemir O.
5th International Symposium on Nitrides, Eskişehir, Turkey, 3 - 05 April 2006, vol.554, pp.201-202
- XLII. **Bor Nitrür Esaslı Seramiklerin Basıncısız Sinterleme ve Sıcak Presleme Yöntemleri ile Üretimi ve Mikroyapısal Karakterizasyonu**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
13. Uluslararası Metalurji-Malzeme Kongresi, 9 - 11 November 2006, pp.368-373
- XLIII. **Zirkonya Esaslı Tam Seramik Malzemelerin Üretimi ve Dış Yapımına Uygulanması**
BOYRAZ T., ERTUĞ B., HAMZAÇEBİ C., GÖKÇE H., ADDEMİR O.
VI. Uluslararası Katılımlı Seramik Kongresi, Turkey, 30 October - 01 November 2006, pp.403-407
- XLIV. **La 3 Dop Edilmiş BaTiO3 Esaslı Seramiklerin Mikroyapısal ve Elektriksel Özelliklerinin İncelenmesi**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
VI. Uluslararası Katılımlı Seramik Kongresi, Turkey, 30 October - 01 November 2006, pp.382-387
- XLV. **Nano -Elmas Katkılı Al-Matriks Kompozitlerinin Üretimi ve Karakterizasyonu**
KAFTLEN ODABAŞI H., BOYRAZ T., ÖVEÇOĞLU M. L., ADDEMİR O.
11.Uluslararası Denizli Malzeme Sempozyumu, 19 - 21 April 2006, pp.305-309
- XLVI. **PMMA Katkısının BaTiO3 Esaslı Poroz Seramiklerin Porozite ve Mikroyapısal Özellikleri Üzerine Etkisinin İncelenmesi**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
11.Uluslararası Denizli Malzeme Sempozyumu, 19 - 21 April 2006, pp.963-966
- XLVII. **La3 Katkılı BaTiO3 Esaslı Poroz Seramiklerin Üretimi ve Mikroyapısal Karakterizasyonu**
ERTUĞ B., BOYRAZ T., ADDEMİR O.
12. Uluslararası Metalurji-Malzeme Kongresi ve Fuarı, 28 September - 02 October 2005, pp.1582-1586
- XLVIII. **The characterization of metal-ceramic interfaces in porcelain teeth**
Boyraz T., Kılıç A., Ertuğ B., Tavşanoğlu T., Karakaş Y., Addemir O.
Proceedings of the 8th Conference and Exhibition of the European Ceramic Society, İstanbul, Turkey, 29 June - 03 July 2003, pp.683-686
- XLIX. **Porselen Dış Yapımı ve Seramik Hammaddelerden Dış Porselen Tozlarının Üretimi**
BOYRAZ T., KILIÇ A., KARAKAŞ Y., ADDEMİR O.
3. Uluslararası Toz Metalurjisi Konferansı, 4 - 08 September 2002, pp.1229-1235
- L. **ZrO2 Esaslı Seramik Sensörler ile Sıvı Çelikte Çözünmüş Oksijen Ölçümü ve Deoksidasyon İşlemi**

Supported Projects

- Boyraz T., Arslan H., ŞEKER A., Project Supported by Higher Education Institutions, Elektrostatik Eğirme Yöntemi ile Elde Edilen Nanolif TEM Görüntülerinin Makine Öğrenmesi Teknikleri Kullanılarak Karakterizasyonu, 2018 - 2019
- Önen U., Kurşun H., Boyraz T., Kurşun T., Erdoğan İ., Project Supported by Higher Education Institutions, Termik Santral Uçucu Küllerinin Seramik Üretiminde Kullanılabilirliğinin Araştırılması, 2017 - 2018
- Boyraz T., Addemir A. O., Project Supported by Higher Education Institutions, ZrO₂ CaO MgO Oksijen Sensörlerinin Üretimi ve Karakterizasyonu, 2006 - 2008
- Boyraz T., Ertuğ B., Addemir A. O., Project Supported by Higher Education Institutions, Porozite Yapıcı Katkıların Grafit ve PMMA BaTiO₃ Esaslı Seramiklerin Nem Sensör Davranışlarına Etkisinin İncelenmesi, 2005 - 2007
- Boyraz T., Addemir A. O., Project Supported by Higher Education Institutions, Seramik Hammaddelerden Dış Porselen Tozlarının Üretimi Uygulama ve Karakterizasyon Çalışmaları, 2003 - 2004
- Boyraz T., Addemir A. O., Project Supported by Higher Education Institutions, Stabilize Edilmiş ZrO₂ Esaslı Seramiklerden Farklı Yöntemlerle Oksijen Sensörü Üretimi ve Performanslarının Karşılaştırılması, 2001 - 2002

Scientific Refereeing

- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, October 2024
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, September 2024
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, December 2023
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, November 2023
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, September 2023
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, April 2023
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, February 2023
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, January 2023
- JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, Journal Indexed in SCI-E, November 2022
- Turkish Journal of Science and Technology, National Scientific Refreed Journal, October 2022
- GAZI UNIVERSITY JOURNAL OF SCIENCE, Journal Indexed in ESCI, July 2022
- Osmaniye Korkut Ata Üniversitesi Fen Bilimleri Enstitüsü Dergisi (Online), National Scientific Refreed Journal, April 2022
- JOURNAL OF COMPOSITE MATERIALS, SCI Journal, April 2022
- H2020 Project, H2020 Research Infrastructures Project, Sivas Cumhuriyet University, Turkey, September 2021
- JOURNAL OF COMPOSITE MATERIALS, SCI Journal, August 2021
- Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, March 2021
- Fırat Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, February 2021
- JOURNAL OF POLYTECHNIC-POLITEKNİK DERGİSİ, Journal Indexed in ESCI, January 2021
- CUMHURİYET SCIENCE JOURNAL, National Scientific Refreed Journal, October 2020
- JOURNAL OF POLYTECHNIC-POLITEKNİK DERGİSİ, Journal Indexed in ESCI, July 2020
- Dicle Üniversitesi Mühendislik Fakültesi Mühendislik Dergisi, National Scientific Refreed Journal, July 2020
- JOURNAL OF POLYTECHNIC-POLITEKNİK DERGİSİ, Journal Indexed in ESCI, July 2020
- SN APPLIED SCIENCES, Other Indexed Journal, June 2020
- JOURNAL OF COMPOSITE MATERIALS, SCI Journal, June 2020
- Project Supported by Higher Education Institutions, BAP Research Project, Ataturk University, Turkey, April 2020
- CUMHURİYET SCIENCE JOURNAL, National Scientific Refreed Journal, September 2019
- Project Supported by Higher Education Institutions, BAP MSc, Sivas Cumhuriyet University, Turkey, June 2019
- Academic Platform journal of engineering and smart systems (Online), National Scientific Refreed Journal, January 2019
- Academic Platform journal of engineering and smart systems (Online), National Scientific Refreed Journal, September

2018

Cumhuriyet Science Journal, National Scientific Refreed Journal, March 2018

Cumhuriyet Science Journal, National Scientific Refreed Journal, February 2018

Çanakkale Onsekiz Mart Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, December 2017

DİCLE ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ, National Scientific Refreed Journal, June 2017

Industrial Thesis Project, Bilim, Sanayi ve Teknoloji Bakanlığı, Teknoyatırım, Turkey, December 2015

Project Supported by Higher Education Institutions, BAP MSc, Sivas Cumhuriyet University, Turkey, December 2015

Project Supported by Other Official Institutions, T.C. BİLİM, SANAYİ VE TEKNOLOJİ BAKANLIĞI Bilim ve Teknoloji Genel Müdürlüğü, Turkey, October 2015

Metrics

Publication: 98

Citation (WoS): 141

Citation (Scopus): 203

H-Index (WoS): 7

H-Index (Scopus): 9

Congress and Symposium Activities

ICENAS'21 - International Conference On Engineering, Natural And Applied Science, Attendee, Osmaniye, Turkey, 2021

ICENTE'21- International Conference on Engineering Technologies , Attendee, Konya, Turkey, 2021

ICAENS 2021 - 1st International Conference on Applied Engineering and Natural Sciences, Attendee, Konya, Turkey, 2021

ISCMP - International Joint Science Congress of Materials and Polymers, Attendee, Burdur, Turkey, 2021

GLOBECER'21 - Global Conference on Engineering Research , Attendee, Çanakkale, Turkey, 2021

IMSMATEC'21 - 4. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology , Attendee, Nevşehir, Turkey, 2021

21st International Conference, Attendee, Burgas, Bulgaria, 2019

APMAS2014 - 4th International Congress on Advances in Applied Physics and Materials Science, Attendee, Muğla, Turkey, 2014

APMAS 2013 - 3rd International Advances in Applied Physics and Material Science Congress , Attendee, Antalya, Turkey, 2013