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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAI-3086-2021

ScopusID: 57190294903

Yoksis Researcher ID: 180317

Education

Doctorate, Yıldız Technical University, Fen Bilimleri Enstitüsü, İmal Usulleri (Dr), Turkey
2015 - 2022

Postgraduate, Yıldız Technical University, Fen Bilimleri Enstitüsü, İmal Usulleri (YI)
(Tezli), Turkey 2011 - 2015

Undergraduate, Marmara University, Teknik Eğitim Fakültesi, Makine Eğitimi Bölümü,
Turkey 2006 - 2010

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, OTOMOTİV SEKTÖRÜNDE KULLANILMAK ÜZERE ÇEVRE DOSTU YENİ NESİL DOĞAL LİF TAKVİYELİ
KOMPOZİT MALZEMELERİN GELİŞİRİLMESİ, Yıldız Technical University, Fen Bilimleri Enstitüsü, İmal Usulleri (Dr),
2022

Postgraduate, Termal bariyer kaplamaların oksidasyon ve sıcaklık korozyonu davranışının incelenmesi, Yıldız Technical
University, Fen Bilimleri Enstitüsü, İmal Usulleri (YI) (Tezli), 2015

Research Areas

Tribology, Non-traditional manufacturing methods, Material, Corrosion and Corrosion Protection, Composites, Plating

Academic Positions

Assistant Professor, Hakkari University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2022 - Continues

Research Assistant, Yıldız Technical University, Faculty Of Mechanical Engineering, Makine Mühendisliği Bölümü, 2012 - 2020

Academic and Administrative Experience

Vice Dean, Hakkari University, 2022 - 2025

Courses

Postgraduate

Yapı Malzemeleri, Postgraduate, 2023 - 2024

İleri Teknoloji Malzemeleri, Postgraduate, 2022 - 2023

İleri Teknoloji Malzemeleri Dersi Asistanı, Postgraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013

Undergraduate

Mukavemet I, Undergraduate, 2023 - 2024

Malzeme Bilgisi, Undergraduate, 2023 - 2024, 2022 - 2023

MALZEME DERSİ LABORATUVAR UYGULAMASI, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2012 - 2013

Malzeme I Dersi Asistanı, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013

KAYNAKLABORATUVAR UYGULAMALARI, Undergraduate, 2016 - 2017, 2014 - 2015, 2013 - 2014

Malzeme 2 Dersi Asistanı, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013

Makine Mühendisliğinde Kompozit Malzemeler, Undergraduate, 2016 - 2017, 2014 - 2015, 2012 - 2013

Talaşlı İmalat Uygulamaları, Undergraduate, 2013 - 2014

MALZEME DERSİ LABORATUVAR UYGULAMASI, Undergraduate, 2011 - 2012

Journal articles indexed in SCI, SSCI, and AHCI

- I. **The Influence of Load and Ball on the Sliding Wear Characteristics of HVOF-Sprayed WC-12Co Composite Coating**
Avcı A.
COATINGS, vol.15, no.1, pp.1-20, 2024 (SCI-Expanded)
- II. **Enhanced CMAS and hot corrosion degradation of YSZ thermal barrier coating with nano powders**
ÖZÇELİK A., AKDOĞAN EKER A., KARABAŞ M., AVCI A., KÜÇÜKYILDIRIM B. O.
Surface and Coatings Technology, vol.481, 2024 (SCI-Expanded)
- III. **Improvement of CMAS resistance of laser glazed and nano-modified YSZ thermal barrier coatings**
AVCI A., Karabaş M., AKDOĞAN EKER A., AKMAN E., Aslan C.
Ceramics International, vol.50, no.7, pp.9985-9999, 2024 (SCI-Expanded)
- IV. **The effects of various boron compounds on the thermal, microstructural and mechanical properties of PLA biocomposites**
AVCI A., AKDOĞAN EKER A., BODUR M. S., KÜÇÜKYILDIRIM B. O.
Thermochimica Acta, vol.731, 2024 (SCI-Expanded)
- V. **Hot corrosion and CMAS degradation of laser-glazed YSZ coating with optimum parameter**
AVCI A., Karabaş M., AKDOĞAN EKER A., AKMAN E., Aslan C.
Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, vol.237, no.11, pp.2722-2734, 2023 (SCI-Expanded)
- VI. **Hot corrosion behavior of CYSZ thermal barrier coating with optimized laser surface modification**
AVCI A., Karabaş M., AKDOĞAN EKER A., AKMAN E., Aslan C.

- Ceramics International, vol.49, no.19, pp.31396-31404, 2023 (SCI-Expanded)
- VII. **Water absorption characterization of boron compounds-reinforced PLA/flax fiber sustainable composite**
 AVCI A., AKDOĞAN EKER A., Bodur M. S., CANDAN Z.
 International Journal of Biological Macromolecules, vol.233, 2023 (SCI-Expanded)
- VIII. **Investigations on the Mechanical Properties of PC and ABS Electrospun Nanofiber Embedded Glass Fiber Reinforced Composite**
 Bodur M. S., Baysan A. A., Komurlu M. U., AVCI A.
 Polymer (Korea), vol.47, no.2, pp.117-126, 2023 (SCI-Expanded)
- IX. **An experimental investigation on the thermal and mechanical characterization of boron/flax/PLA sustainable composite**
 AVCI A., AKDOĞAN EKER A., Bodur M. S., CANDAN Z.
 Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, vol.236, no.12, pp.2561-2573, 2022 (SCI-Expanded)
- X. **Influence of Compatibilization and Internal Lubricant on the Mechanical and Thermo-mechanical Properties of PLA/TPU Compound**
 AVCI A., AKDOĞAN EKER A., Bodur M. S.
 Polymer (Korea), vol.46, no.5, pp.671-683, 2022 (SCI-Expanded)
- XI. **Effect of coupling agent and alkali treatment on mechanical, thermal and morphological properties of flax-fiber-reinforced PLA composites**
 Avci A., AKDOĞAN EKER A., Bodur M. S.
 Green Materials, vol.9, no.3, pp.131-144, 2020 (SCI-Expanded)
- XII. **An investigation of oxidation, hot corrosion, and thermal shock behavior of atmospheric plasma-sprayed YSZ-Al₂O₃ composite thermal barrier coatings**
 AVCI A., AKDOĞAN EKER A., Karabas M.
 International Journal of Materials Research, vol.111, no.7, pp.567-580, 2020 (SCI-Expanded)
- XIII. **Comparison of the early period effects of bone marrow-derived mesenchymal stem cells and platelet-rich plasma on the Achilles tendon ruptures in rats**
 Yuksel S., Guleç M. A., Gultekin M. Z., Adanır O., Caglar A., Beytemur O., KÜÇÜKYILDIRIM B. O., AVCI A., Subası C., İnci Ç., et al.
 Connective Tissue Research, vol.57, no.5, pp.360-373, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Investigation of Wear Behavior of Composite CYSZ Coating Under Different Loads**
 Avcı A.
 International Journal of 3D Printing Technologies and Digital Industry, vol.8, no.3, pp.387-398, 2024 (Peer-Reviewed Journal)
- II. **Investigation of wear behaviour of TiO₂ and Al₂O₃ reinforced YSZ coating**
 AVCI A., KARABAŞ M.
 Journal of Materials and Mechatronics:A (Online), vol.5, 2024 (Peer-Reviewed Journal)
- III. **YSZ Termal Bariyer Kaplamanın Elektroforetik Nano-YSZ Kaplama ile Korozyon Direncinin İyileştirilmesi**
 ÖZCELİK A., AVCI A., KARABAŞ M., AKDOĞAN EKER A.
 All Sciences Proceedings, vol.7, no.4, pp.371-382, 2023 (Peer-Reviewed Journal)
- IV. **Examination of water uptake performance and mechanical properties of PLA/flax fiber biocomposites with the coupling agent**
 AVCI A., AKDOĞAN EKER A., BODUR M. S., BAKKAL M.
 Synsint Research Group, vol.2, pp.14-20, 2022 (Peer-Reviewed Journal)
- V. **Ti-6Al-4V Alaşımının Şekillendirilmesi İçin Kalıp Malzemesi Seçimi**

- YÜKSEL K. M., AKDOĞAN EKER A., AVCI A., KÜÇÜKYILDIRIM B. O.
Avrupa Bilim ve Teknoloji Dergisi, vol.34, pp.729-734, 2022 (Peer-Reviewed Journal)
- VI. A Review Of Performance Of Green Composites And Using In Automotive Industry**
Avcı A., Akdogan Eker A., Bodur M. S.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.11, no.4, pp.3035-3054, 2021 (Peer-Reviewed Journal)
- VII. Investigation of the Effects of Splenectomy on Bone Healing (Experimental Study)**
Gültekin M. Z., Yüksel S., Alagöz E., Özsoy Ş., AVCI A., Güleç A., BAYRAMOĞLU Z.
İstanbul Medical Journal, vol.22, no.1, pp.45-49, 2021 (Peer-Reviewed Journal)
- VIII. Material selection in hot shaping molds of titanium alloys**
AKDOĞAN EKER A., AVCI A., Aydin H., Aydoğan C. S., Erol E.
PROCEDIA MANUFACTURING, vol.50, pp.723-728, 2020 (Scopus)
- IX. Ratlarda Opioidlerin ve Non-Steroidal Anti-Enflamatuvar İlaçların Kırık İyileşmesi Üzerine Etkilerinin Karşılaştırılması**
Gültekin M. Z., Yüksel S., Alagöz E., Özsoy Ş., AVCI A., Güleç A., Uğur O.
Adiyaman Üniversitesi Sağlık Bilimleri Dergisi, pp.1033-1047, 2018 (Peer-Reviewed Journal)
- X. RİVAROKSABAN VE FARKLI ANTİKOAGÜLANLARIN KIRIK KAYNAMASI ÜZERİNE ETKİLERİNİN BİR RAT MODELİNDE KARŞILAŞTIRILMASI**
Gültekin M. Z., Alagöz E., Yüksel S., Özsoy Ş., AVCI A., Güleç A., Uğur O.
Adiyaman Üniversitesi Sağlık Bilimleri Dergisi, pp.310-322, 2018 (Peer-Reviewed Journal)

Books

- I. Additive Manufacturing in the Automotive Industry**
AVCI A.
in: Composite Materials with Different Engineering Approaches IV, Boztoprak Yalçın, Yazıcı Murat, Editor, Özgür Press, pp.133-154, 2023
- II. BİYOKOMPOZİTLERİN TERMAL ÖZELLİKLERİ**
AVCI A., AKDOĞAN EKER A., BODUR M. S.
in: Mühendislik Bilimleri Alanında Yeni Trendler, Prof. Dr. Birol KILIÇ, Prof. Dr. Gülden BAŞYİĞİT KILIÇ, Editor, Duvar, Ankara, pp.721-741, 2022
- III. DOĞAL LİF TAKVİYELER**
AVCI A., BODUR M. S., AKDOĞAN EKER A.
in: Mühendislik Bilimleri Alanında Yeni Trendler, Prof. Dr. Birol KILIÇ, Prof. Dr. Gülden BAŞYİĞİT KILIÇ, Editor, Duvar, Ankara, pp.47-64, 2022
- IV. Microstructure and Oxidation Behavior of Atmospheric Plasma-Sprayed Thermal Barrier Coatings**
AVCI A., AKDOĞAN EKER A., EKER B.
in: Exergetic, Energetic and Environmental Dimensions, Ibrahim Dincer, C. Ozgur Colpan, Onder Kizilkan, Editor, Elsevier, Oxford, pp.793-814, 2017

Papers Presented at Peer-Reviewed Scientific Conferences

- I. Laser Coating Of Al And Fe Powders On The Surface Of Ysz Thermal Barrier Coating**
AVCI A., KARABAŞ M., AKMAN E.
10.INTERNATIONAL PALANDÖKEN SCIENTIFIC STUDIES CONGRESS, Erzurum, Turkey, 15 - 16 February 2025,
pp.561-568
- II. Fatigue Characteristics of NiTi Shape Memory Alloy**
KÜÇÜKYILDIRIM B. O., AKDOĞAN EKER A., AVCI A.
2ND INTERNATIONAL CONFERENCE ON RECENT AND INNOVATIVE RESULTS IN ENGINEERING AND
TECHNOLOGY ICRIRET 2025, Konya, Turkey, 11 - 12 February 2025, pp.197-204

- III. EFFECT OF LASER SURFACE MODIFICATION ON MICROSTRUCTURAL EVOLUTION OF ENVIRONMENTAL BARRIER COATINGS**
SAYAR M. H., AKDOĞAN EKER A., KARABAŞ M., AVCI A., AKMAN E.
SEVENTH INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING ISTANBUL 2024,
İstanbul, Turkey, 24 - 26 December 2024
- IV. WC-9Co5Cr1Ni kompozit kaplamanın kaymалı aşınma karakteristiği**
AVCI A.
Proceeding Book of 3rd International Conference on Frontiers in Academic Research ICFAR 2024, Konya, Turkey,
15 July 2024, vol.1, pp.636-642
- V. YSZ Termal Bariyer Kaplamanın Elektroforetik Nano-YSZ Kaplama ile Korozyon Direncinin İyileştirilmesi**
ÖZÇELİK A., AVCI A., KARABAŞ M., AKDOĞAN EKER A.
1st International Conference on Contemporary Academic Research, Konya, Turkey, 17 - 19 May 2023
- VI. An experimental study on the thermal properties of boron/PLA sustainable biocomposites**
AVCI A., AKDOĞAN EKER A., BODUR M. S.
6th International Conference on Advances in Natural and Applied Sciences, Ağrı, Turkey, 11 - 13 October 2022,
pp.203-208
- VII. The effect of ulexite compound on the mechanical properties of the PLA matrix**
AVCI A., AKDOĞAN EKER A., BODUR M. S.
6th International Conference on Advances in Natural and Applied Sciences, Ağrı, Turkey, 11 - 13 October 2022,
pp.209-213
- VIII. EFFECT OF WATER UPTAKE PERFORMANCE OF PLA/FLAX FIBER GREEN COMPOSITES ON THE IMPACT BEHAVIOUR**
AVCI A., AKDOĞAN EKER A., BAKKAL M., BODUR M. S.
INTERNATIONAL CONFERENCE ON NUCLEAR TECHNOLOGY, RADIATION SAFETY AND ADVANCED TECHNOLOGICAL RESEARCHES, İstanbul, Turkey, 10 - 11 December 2021, pp.147-148
- IX. EFFECT OF LASER SURFACE MODIFICATION ON HOT CORROSION BEHAVIOR OF YSZ AND CYSZ THERMAL BARRIER COATINGS**
AVCI A., KARABAŞ M., AKMAN E., AKDOĞAN EKER A., ASLAN C.
6th International Conference on Advances in Mechanical Engineering, İstanbul, Turkey, 20 - 22 October 2021,
pp.423-431
- X. INVESTIGATION OF WATER UPTAKE PERFORMANCE OF PLA/FLAX FIBER GREEN COMPOSITES WITH ALKALI TREATMENT**
AKDOĞAN EKER A., AVCI A., BODUR M. S.
6th International Conference on Advances in Mechanical Engineering, İstanbul, Turkey, 20 - 22 October 2021,
pp.432-437
- XI. INVESTIGATION OF MECHANICAL AND THERMOS MECHANICAL BEHAVIOR OF FLAX FIBER-REINFORCED PLA BIO-COMPOSITES WITH A COUPLING AGENT AND INTERNAL LUBRICANT**
AVCI A., AKDOĞAN EKER A., BODUR M. S.
6th INTERNATIONAL CONGRESS ON ENGINEERING, ARCHITECTURE AND DESIGN, İstanbul, Turkey, 17 - 18 December 2020, pp.531-540
- XII. ALKALI İYILEŞTİRMEİN KETEN LİFİNİN MORFOLOJİSİNE ETKİSİ**
AVCI A., AKDOĞAN EKER A.
2nd INTERNATIONAL CONGRESS ON ENGINEERING AND TECHNOLOGY MANAGEMENT, Mardin, Turkey, 24 - 25 October 2019, pp.179
- XIII. EFFECT OF THE EXTRUSION PARAMETERS ON THE MECHANICAL PROPERTIES OF NATURAL FIBER REINFORCED COMPOSITES**
BAYSAN A. A., AVCI A., BODUR S., AKDOĞAN EKER A., BAKKAL M.
4. ULUSLARARASIMÜHENDISLIK, MİMARLIK VE TASARIM KONGRESİ, Turkey, 23 - 24 April 2019, pp.530-539
- XIV. ZİRKONYA ESASLI TERMAL BARIYER KAPLAMALARIN OPTİMUM LAZER YÜZEY MODİFİKASYON PARAMETRELERİNİN BELİRLENMESİ**

- Aslan C., AKDOĞAN EKER A., AKMAN E., AVCI A., KARABAŞ M.
4 INTERNATIONAL CONGRESS ON ENGINEERING, ARCHITECTURE AND DESIGN, İstanbul, Turkey, 23 - 24 April
2019, vol.1, pp.304-312
- XV. **ATMOSFERİK PLAZMA SPREY YÖNTEMİ İLE ÜRETİLEN FARKLI SERAMİK KAPLAMALARIN KURU
AŞINMA DAVRANIŞININ İNCELENMESİ**
AVCI A., AKDOĞAN EKER A., KARABAŞ M., BAL E.
3.uluslararası mühendislik mimarlık ve tasarım kongresi, 4 - 05 May 2018
- XVI. **"Isothermal Oxidation Behavior of Atmospheric Plasma Sprayed Thermal Barrier Coatings At 1050 °C**
AKDOĞAN EKER A., AVCI A., Akilotu A.
INTERNATIONAL MATERIALS TECHNOLOGIES AND METALLURGY CONFERENCE 2017, 26 - 27 October 2017,
pp.133-136
- XVII. **Thermal Shock Behaviour of Athmospeheric Plasma Spray Thermal Barrier Coatings**
AVCI A., AKDOĞAN EKER A., Yaşar A.
INTERNATIONAL MATERIALS TECHNOLOGIES AND METALLURGY CONFERENCE 2017, 26 - 27 October 2017,
pp.125-129
- XVIII. **Wear behaviour of NiTi Shape Memory Alloys**
AVCI A., AKDOĞAN EKER A.
9th International CONFERENCE ON TRIBOLOGY, Nevşehir, Turkey, 13 - 15 September 2017, pp.30-36
- XIX. **RAYLI SİSTEMLERDE KULLANILAN MAKAS ISITICILARINDA HASAR ANALİZİ VE KOROZYON TESTİ**
AVCI A., AKDOĞAN EKER A., Deniz F.
INTERNATIONAL CONGRESS ON ENGINEERING ARCHITECTURE AND DESIGN, 12 - 13 May 2017, pp.809-810
- XX. **MICROSTRUCTRAL AND OXIDATION BEHAVIOR OF ATMOSPHERIC PLASMA SPRAYED THERMAL
BARRIER COATINGS**
AVCI A., AKDOĞAN EKER A.
INTERNATIONAL CONFERENCE ON ENERGY SYSTEMS ISTANBUL 2016- ICES2016 21-23 December 2016, Yıldız
Technical University, İstanbul, Turkey, 21 - 23 December 2016
- XXI. **HOT CORROSION BEHAVIOR OF YSZ AL2O3 COMPOSITE THERMAL BARRIER COATINGS PRODUCED BY
PLASMA SPREYED**
AVCI A., AKDOĞAN EKER A.
16th International Materials Symposium IMSP'xx2016, PAMUKKALE ÜNİVERSİTESİ, Denizli, Turkey, 12 - 14
October 2016
- XXII. **Hardness and fracture toughness of atmospheric plasma sprayed yttria stabilized zirconia thermal
barrier coatings**
AVCI A., AKDOĞAN EKER A.
International Journal of ArtsSciencesFREIBURG CONFERENCE GERMANY, Freiburg, Germany, 28 November - 02
December 2016
- XXIII. **Effect of carbon nanotube type on the growth of Lima Bean Phaseolus lunatus seeds in watering**
AVCI A., KÜÇÜKYILDİRİM B. O., AKDOĞAN EKER A.
EEAE'xx2015-VI Internaional Scientific Conference, Ruse, Bulgaria, 11 - 12 November 2015, pp.321-325
- XXIV. **TIME DEPENDENT EFFECT OF CARBON NANO TUBE ON THE GROWTH OF LIMA BEAN PHASEOLUS
LUNATUS SEEDS IN WATERING**
KÜÇÜKYILDİRİM B. O., AKDOĞAN EKER A., YILDIZ C., AVCI A.
INTERNATIONAL JOURNAL OF ARTS AND SCIENCE ROME ITALY, 19 - 22 October 2015
- XXV. **FATIGUE BEHAVIOR OF Ni Ti SHAPE MEMORY ALLOY WIRES**
AVCI A., KÜÇÜKYILDİRİM B. O., AKDOĞAN EKER A., ERDEM U.
FATIGUE BEHAVIOR OF Ni-Ti SHAPE MEMORY ALLOY WIRES, 16 June 2014
- XXVI. **TRIBOLOGICAL PERFORMANCES OF YSZ AND AL2O3 COMPOSITE COATINGS DEPOSITED BY AIR
PLASMA SPRAY PROCESS**
AVCI A., AKDOĞAN EKER A.
8th International Quality Conference, Kragujevac, Serbia, 23 - 25 May 2014, pp.735-740

Metrics

Publication: 54
Citation (Scopus): 138
H-Index (WoS): 1
H-Index (Scopus): 7

Artistic Activity

AVCI A., IV. Ulusal Nano Teknoloji Kongresi, March 2015