

Assoc. Prof. SİNAN YILMAZ

Personal Information

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Address: Uzunçiftlik Nuh Çimento Meslek YüksekOkulu Uzunçiftlik Mahallesi Özdemir Atman Caddesi No: 28 41180, Kartepe/KOCAELİ

International Researcher IDs

ScholarID: nM8sjokAAAAJ

ORCID: 0000-0001-7107-5454

Publons / Web Of Science ResearcherID: F-6633-2018

ScopusID: 9338266600

Yoksis Researcher ID: 44211

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Poliamit kompozitlerin kırılma tokluğu ve kırılma davranışının esas kırılma işi ve j-integral metotları ile analizi, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2015

Postgraduate, Çok yüksek molekül ağırlıklı polietilenin hidrotermal yaşlandırma etkisi altındaki kırılma davranışı, Kocaeli Üniversitesi, Fen Bilimleri Enstitüsü, Makine Mühendisliği Anabilim Dalı, 2010

Research Areas

Mechanical Engineering, Construction and Manufacturing, Tribology, Machine Elements, Machine Design, Computer Aided Design and Manufacturing, Material, Machining Methods, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Kocaeli University, Uzunçiftlik Nuh Çimento Meslek Yüksekokulu, Makine Ve Metal Teknolojileri, 2024 - Continues

Assistant Professor, Kocaeli University, Uzunçiftlik Nuh Çimento Meslek Yüksekokulu, Makine Ve Metal Teknolojileri, 2020 - 2024

Assistant Professor, Kocaeli University, Ali Rıza Veziroğlu Meslek Yüksekokulu, Makine ve Metal Teknolojileri, 2018 - 2020

Lecturer, Kocaeli University, Ali Rıza Veziroğlu Meslek Yüksekokulu, Makine ve Metal Teknolojileri, 2012 - 2018

Lecturer, Ahi Evran Üniversitesi, Kaman Meslek Yüksekokulu, Makine Ve Metal Teknolojileri Bölümü, 2010 - 2012

Academic and Administrative Experience

Kocaeli Üniversitesi, Ali Rıza Veziroğlu Meslek Yüksekokulu, Makine Ve Metal Teknolojileri Bölümü, 2013 - 2015

Courses

İmalat İşlemleri - I, Associate Degree, 2023 - 2024, 2022 - 2023, 2021 - 2022
Bilgisayar Destekli Tasarım, Associate Degree, 2023 - 2024, 2022 - 2023
TERMAL ANALIZİN ENDÜSTRİYEL UYGULAMALARI, Postgraduate, 2023 - 2024
Uçak Malzemelerinin Yorulma ve Sürünme Davranışları, Postgraduate, 2022 - 2023, 2021 - 2022
TAKIM MALZEMELERİ, Postgraduate, 2022 - 2023, 2021 - 2022
Makine Bilimi ve Elemanları, Associate Degree, 2023 - 2024, 2022 - 2023
İMALAT İŞLEMLERİ II, Associate Degree, 2021 - 2022
Bilgisayar Destekli Teknik Resim, Associate Degree, 2021 - 2022
MAKİNA ELEMANLARI, Associate Degree, 2021 - 2022
Bilgisayar Destekli Çizim, Undergraduate, 2021 - 2022, 2020 - 2021
Makine Elemanları, Undergraduate, 2021 - 2022, 2020 - 2021

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Analyzing the Influence of Multimaterial 3D Printing and Postprocessing on Mechanical and Tribological Characteristics**
Yılmaz S., Okan Gul , Eyri B., Karsli N. G., Yılmaz T.
MACROMOLECULAR MATERIALS AND ENGINEERING, vol.309, no.5, pp.1-11, 2024 (SCI-Expanded)
- II. **Investigation of the Influence of Salt Remelting Process on the Mechanical, Tribological and Thermal Properties of 3D Printed PLA Materials**
Yılmaz S., Eyri B., Gül O., Karşı Yılmaz N. G., Yılmaz T.
POLYMER ENGINEERING AND SCIENCE, vol.64, no.1, pp.17-30, 2024 (SCI-Expanded)
- III. **Comprehensive Analysis of 3D Printed PA6.6 and Fiber-Reinforced Variants: Revealing Mechanical Properties and Adhesive Wear Behavior**
Yılmaz S.
POLYMER COMPOSITES, vol.45, no.2, pp.1446-1460, 2024 (SCI-Expanded)
- IV. **Comprehensive characterization of 3D-printed bamboo/poly(lactic acid) bio composites**
YILMAZ S., GÜL O., EYRİ B., YILMAZ N., YILMAZ T.
POLYMER ENGINEERING AND SCIENCE, vol.63, no.9, pp.2958-2972, 2023 (SCI-Expanded)
- V. **Investigation of the effect of zeolite, bentonite, and basalt fiber as natural reinforcing materials on the material properties of PPS and CF-reinforced PPS**
Kizil A., Dincer U., Yılmaz S., Gul O., Karşı Yılmaz N. G., Yılmaz T.
POLYMER ENGINEERING AND SCIENCE, vol.63, no.4, pp.1314-1322, 2023 (SCI-Expanded)
- VI. **Properties of compatibilized rPET/PC Blends with epoxy based Chain Extender**
Yılmaz S., Gul O., Yılmaz N. G., Yılmaz T.
KGK-KAUTSCHUK GUMMI KUNSTSTOFFE, no.4, pp.62-67, 2022 (SCI-Expanded)
- VII. **Effect of chain extender and terpolymers on tensile and fracture properties of polyamide 6**
Yılmaz S., Gül O., Yılmaz T.
POLYMER, vol.65, pp.63-71, 2015 (SCI-Expanded)
- VIII. **Thermomechanical and Solid Particle Erosion Behaviour of CaCO₃ and SGF (Short Glass Fibre) Reinforced ABS/PA6 Composites**
Şahin A. E., Yılmaz S., Yılmaz T., Sınmazçelik T.
ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1062-1064, 2015 (SCI-Expanded)
- IX. **Effect of CBC and G-POSS on Tribological Behaviour of Polyamide 6 and Short Glass Fiber Reinforced Polyamide 6 Composites**

Gül O., Yılmaz S., Yılmaz T.

ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1121-1123, 2015 (SCI-Expanded)

- X. **Effect of POSS and chain extender on tensile and fracture properties of neat and short glass fiber reinforced polyamide 6 composites**
Yılmaz S., Yılmaz T.
COMPOSITES PART A-APPLIED SCIENCE AND MANUFACTURING, vol.67, pp.274-281, 2014 (SCI-Expanded)
- XI. **Essential work of fracture analysis of short glass fiber and/or calcite reinforced ABS/PA6 composites**
Yılmaz S., Yılmaz T., Kahraman B.
POLYMER ENGINEERING AND SCIENCE, vol.54, no.3, pp.540-550, 2014 (SCI-Expanded)
- XII. **Fracture toughness analysis of O-POSS/PLA composites assessed by essential work of fracture method**
Yılmaz S., Kodal M., Yılmaz T., Özkoç G.
COMPOSITES PART B-ENGINEERING, vol.56, pp.527-535, 2014 (SCI-Expanded)
- XIII. **Effect of annealing process in water on the essential work of fracture response of ultra high molecular weight polyethylene**
Yılmaz S., Yılmaz T., Arıcı A. A.
JOURNAL OF MATERIALS SCIENCE, vol.46, no.6, pp.1758-1766, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **Tensile and wear behavior of 3D printed ABS and PC/ABS: An experimental study**
YILMAZ S.
International Journal of Advanced Natural Sciences and Engineering Researches, vol.8, no.2, pp.473-478, 2024
(Peer-Reviewed Journal)
- II. **Comparative Investigation of Mechanical, Tribological and Thermo-Mechanical Properties of Commonly Used 3D Printing Materials**
Yılmaz S.
Avrupa Bilim ve Teknoloji Dergisi, no.32, pp.827-831, 2021 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **FFF-BASED 3D PRINTING OF METALS: A BRIEF REVIEW**
YILMAZ S.
in: INTERNATIONAL STUDIES IN ENGINEERING, ÖZALP COŞKUN, BARDAK SELAHATTİN, Editor, Serüven Yayınevi, Ankara, pp.131-139, 2024

Refereed Congress / Symposium Publications in Proceedings

- I. **Tensile and wear behavior of 3D printed ABS and PC/ABS: An experimental study**
YILMAZ S.
4th International Conference on Innovative Academic Studies March 12 – 13 in 2024, Konya, Turkey, 12 - 13 March 2024
- II. **Exploring Elasto-Plastic Fracture Behaviour of 3D Printed PC/ ABS Blend**
Yılmaz S.
PROCEEDING BOOK OF 3RD INTERNATIONAL CONFERENCE ON SCIENTIFIC AND ACADEMIC RESEARCH ICSAR 2023, Konya, Turkey, 25 - 26 December 2023, vol.1, no.7, pp.978-981
- III. **Comparative Investigation of Mechanical, Tribological and Thermo-Mechanical Properties of**

Commonly Used 3D Printing Materials

YILMAZ S.

RDCONF, International Conference on Design, Research and Development 2021, 31 December 2021, vol.32, pp.827-831

- IV. **Essential work of fracture toughness analysis of poly(lactic acid) thermoplastic starch blends**
YILMAZ S., KODAL M., ÖZKOÇ G.
4 th International Conference on Engineering and Natural Sciences, Kiev, Ukraine, 2 - 06 May 2018, pp.190
- V. **Study on mechanical/thermal properties and fracture behavior of PLA toughened with PBAT and POSS**
YILMAZ S., KODAL M., KILIÇ TÜCCAR N., ÖZKOÇ G.
4 th International Conference on Engineering and Natural Sciences, Kiev, Ukraine, 2 - 06 May 2018, pp.189
- VI. **Investigation Parameter Effects on Tribological Performance of Short Carbon Fiber and Pumice Particle Reinforced PPS/PA66 Blend**
ŞAHİN A. E., YILMAZ S., SINMAZÇELİK T., YILMAZ T.
MACRO 2016-46th IUPAC WORLD POLYMER CONGRESS, 17 - 21 July 2016
- VII. **Investigation of Thermal Mechanical Properties and Abrasive Wear Behaviour of Pumice Particle Short Carbon Fibre and POSS Reinforced PPS**
YILMAZ S., ŞAHİN A. E., GÜL O., SINMAZÇELİK T., YILMAZ T.
The International Conference on Engineering and Natural Sciences (ICENS-2016), 24 - 28 May 2016
- VIII. **Tribological Performance of Short Carbon Fiber and Pumice Particle Reinforced PPS/PA66 Blend**
ŞAHİN A. E., YILMAZ S., SINMAZÇELİK T., YILMAZ T.
The International Conference on Engineering and Natural Sciences (ICENS), 24 - 28 May 2016
- IX. **POMZA TOZU VE KARBON ELYAF TAKVİYELİ POLİFENİLEN SÜLFİD PPS KOMPOZİTLERİN ADHEZİF AŞINMA DAVRANIŞININ İNCELENMESİ**
YILMAZ S., ŞAHİN A. E., YILMAZ T., SINMAZÇELİK T.
ULUSLARARASI KATILIMLI III. EGE KOMPOZİT MALZEMELER SEMPOZYUMU, 5 - 07 November 2015
- X. **Pomza Tozu ve Karbon Elyaf Takviyeli Polifenilen Sülfid (PPS) Kompozitlerin Adhezif Aşınma Davranışının İncelenmesi**
YILMAZ S., ŞAHİN A. E., YILMAZ T., SINMAZÇELİK T.
Uluslararası Katılımlı III. Ege Kompozit Malzemeler Sempozyumu, Turkey, 5 - 07 November 2015
- XI. **GERİ DÖNÜŞTÜRÜLMÜŞ PET VE POLİKARBONAT HARMANLARININ ÖZELLİKLERİNİN ZİNCİR UZATICI KULLANILARAK İYİLEŞTİRİLMESİ**
GÜL O., KARSLI YILMAZ N. G., YILMAZ S., YILMAZ T.
1. Ulusal Plastik Teknolojileri Sempozyumu (UPTS2015), Turkey, 15 - 16 October 2015
- XII. **Geri Dönüştürülmüş PET Polikarbonat Harmanlarının Özelliklerinin Zincir Uzatici Kullanılarak İyileştirilmesi**
GÜL O., KARSLI YILMAZ N. G., YILMAZ S., YILMAZ T.
I. Ulusal Plastik Teknolojileri Sempozyumu"Plastikler, Polimer Kompozitler, Şekillendirme Teknolojileri, Turkey, 15 - 16 October 2015
- XIII. **Investigation the Properties of Recycled PET/PC Blends In the Presence of Epoxy Based Chain Extender**
GÜL O., YILMAZ S., KARSLI YILMAZ N. G., YILMAZ T.
5th INTERNATIONAL ADVANCES IN APPLIED PHYSICS AND MATERIALS SCIENCE CONGRESS & EXHIBITION, 16 - 19 April 2015
- XIV. **Essential Work of Fracture Toughness and Mechanical Properties of Recycled PA 6**
GÜL O., YILMAZ S., YILMAZ T.
22nd Annual International Conference on Composites or Nano Engineering, ICCE-22, 13 - 19 July 2014
- XV. **Fracture Toughness Evaluation Of Toughened Polyamide 6 with Lotader And Chain Extenders**
YILMAZ S., YILMAZ T.
ICCE-22 Twenty Second Annual International Conference on Composites/Nano Engineering, 13 - 19 July 2014
- XVI. **The Twenty second Annual International Conference on COMPOSITES NANO ENGINEERING ICCE 22**

GÜL O., YILMAZ S., YILMAZ T.

4. The International Advances In Applied Physics And Materials Science Congress&Exhibition, APMAS 2014, 24 - 27 April 2014

XVII. Investigation of Tribological Performance of Polyamide 6 PA6 Short Fiber Reinforced PA6 Composites

GÜL O., YILMAZ S., YILMAZ T.

4. The International Advances In Applied Physics And Materials Science Congress&Exhibition, APMAS 2014, 24 - 27 April 2014

XVIII. Thermomechanical and Solid Particle Erosion Behavior of CaCO₃ and SGF (Short Glass Fibre) Reinforced ABS/PA6 Composites

ŞAHİN A. E., YILMAZ S., YILMAZ T., YILDIRAN Y., AVCU E., SINMAZÇELİK T.

4th International Advances in Applied Physics and Materials Science Congress&Exhibition (APMAS 2014), 24 - 27 April 2014

XIX. FARKLI KALIP SICAKLIKLARINDA ÜRETİLEN POSS KATKILI PA 6 MATRİSLİ KOMPOZİTLERİN KIRILMA DAVRANIŞLARININ ESAS KIRILMA İŞİ METODU İLE KARAKTERİZASYONU

YILMAZ S., GÖR A., YILMAZ T.

II. Ulusal Ege Kompozit Malzemeler Sempozyumu - KOMPEGE 2013, Turkey, 7 - 09 November 2013

XX. Farklı Kalıp Sıcaklıklarında Üretilen POSS Katkılı PA6 Matrisli Kompozitlerin Kırılma Davranışlarının Esas Kırılma İşİ Metodu ile Karakterizasyonu

YILMAZ S., GÖR A., YILMAZ T.

II. Ulusal Ege Kompozit Malzemeler Sempozyumu, Turkey, 7 - 09 November 2013

XXI. Fracture Behavior of O-POSS/PLA Composites by Using the Essential Work of Fracture Method

YILMAZ S., KODAL M., YILMAZ T., ÖZKOÇ G.

4th International Conference on Biodegradable and Biobased Polymers-BIOPOL, Italy, 2 - 04 October 2013

XXII. Cam Elyafı ve Kalsit Takviyeli ABS/PA6 Kompozitlerin Kırılma Davranışlarının Esas Kırılma İşİ Yöntemi ile İncelenmesi

KAHRAMAN B., YILMAZ S., YILMAZ T.

4. Ulusal Polimer Bilim ve Teknoloji Kongresi, Turkey, 5 - 08 September 2012

XXIII. Hidrotermal Yaşlandırmanın Çok Yüksek Molekül Ağırlıklı Polietilen Malzemenin Kırılma Davranışına Etkisi

YILMAZ S., ARICI A. A., YILMAZ T.

3. Ulusal Polimer Bilim ve Teknoloji Kongresi, Turkey, 12 - 14 May 2010

Scientific Refereeing

POLYMER COMPOSITES, SCI Journal, April 2024

ENERGY, SCI Journal, April 2024

International Journal of 3D Printing Technologies and Digital Industry, National Scientific Refreed Journal, March 2024

POLYMER INTERNATIONAL, National Scientific Refreed Journal, March 2024

POLYMER COMPOSITES, SCI Journal, January 2024

POLYMER ENGINEERING AND SCIENCE, SCI Journal, January 2024

POLYMER COMPOSITES, SCI Journal, January 2024

POLYMER COMPOSITES, SCI Journal, January 2024

POLYMER COMPOSITES, SCI Journal, April 2019

POLYMER COMPOSITES, SCI Journal, August 2018

POLYMER COMPOSITES, SCI Journal, June 2018

POLYMERS FOR ADVANCED TECHNOLOGIES, SCI Journal, May 2018

ENGINEERING FRACTURE MECHANICS, SCI Journal, November 2017

COMPOSITES SCIENCE AND TECHNOLOGY, SCI Journal, May 2017

POLYMER COMPOSITES, SCI Journal, May 2017

POLYMER COMPOSITES, SCI Journal, April 2017
COMPOSITES SCIENCE AND TECHNOLOGY, SCI Journal, March 2017
ENGINEERING FRACTURE MECHANICS, SCI Journal, January 2017
POLYMER COMPOSITES, SCI Journal, March 2016
POLYMER COMPOSITES, SCI Journal, March 2016
JOURNAL OF APPLIED STATISTICS, SCI Journal, December 2015
POLYMER, SCI Journal, November 2015

Metrics

Publication: 40
Citation (WoS): 113
Citation (Scopus): 122
H-Index (WoS): 6
H-Index (Scopus): 6

Scholarships

1001 - Arařtırma , TUBITAK, 2014 - 2015
1002 - Hızlı Destek, TUBITAK, 2013 - 2014

Non Academic Experience

TEZCAN GALVANİZ A.Ş.
Business Establishment Private, Tezcan Galvaniz A.Ş.
Business Establishment Private, Eta Makina
ETA MAKİNA
UYSAL DOĞALGAZ