

## Asst. Prof. ESİN KARPAT

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-3387-2021

Yoksis Researcher ID: 156566

### Education Information

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

Postgraduate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, Turkey 1999 - 2002

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Measurement and Evaluation, Eğitimde İnovasyon ve Etkileşim, Bursa Uludağ Üniversitesi, 2020

### Dissertations

Doctorate, Gömülü ve/veya örtülü nesnelerin algılanmasında yeni yaklaşımlar, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, FEN BİLİMLERİ ENSTİTÜSÜ, 2009

Postgraduate, Karmaşık dalga propagasyonu denklemlerinin parabolik denklem yöntemiyle modellenmesi, 2002

### Research Areas

Electric and Magnetic Fields, Electromagnetic Environment and Interaction, Electromagnetic Waves, Antennas and Propagation

### Academic Titles / Tasks

Assistant Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2013

- Continues

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

## Academic and Administrative Experience

Akreditasyon, Sürekli Gelişim ve Yenilenme Kurulu Üyesi, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2014 - 2023

Deputy Head of Department, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2014 - 2023

## Courses

Sayısal Analiz, Undergraduate, 2022 - 2023

Electromagnetic Wave Propagation, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Sayısal Analiz, Undergraduate, 2022 - 2023

Electromagnetic Field Theory, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Numerical Analysis, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Electromagnetic Wave Propagation, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Electromagnetic Field Theory, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

## Advising Theses

Karpat E., 28 GHz frekansında 5G kablosuz haberleşme için S-şekilli mikroşerit anten tasarımı ve analizi, Postgraduate, M.KHASIYEV(Student), 2023

Karpat E., Dış mekân elektromanyetik maruziyet seviyesinin yapay sinir ağı ve bulanık mantık ile tahmini, Doctorate, M.RAFET(Student), 2022

Karpat E., Mikrodalga frekansında elektromanyetik soğurucu tasarımı ve optimizasyonu, Postgraduate, S.KANKILIÇ(Student), 2022

KARPAT E., Design and performance optimisation of microstrip antennas, Postgraduate, F.İmamoğlu(Student), 2019

KARPAT E., Analysis of the effect of radiofrequency bands on electromagnetic field pollution in the Bursa Uludağ University central campus, Postgraduate, M.Mohamedosman(Student), 2019

KARPAT E., Electromagnetic pollution mapping of Bursa Uludag University Engineering Faculty buildings, Postgraduate, B.Çelik(Student), 2019

## Published journal articles indexed by SCI, SSCI, and AHCI

### I. Optimization and Comparative Analysis of Quarter-Circular Slotted Microstrip Patch Antenna Using Particle Swarm and Fruit Fly Algorithms

KARPAT E., Imamoglu F.

INTERNATIONAL ARAB JOURNAL OF INFORMATION TECHNOLOGY, vol.20, no.4, pp.624-631, 2023 (SCI-Expanded)

### II. SUBSURFACE IMAGING, FDTD-BASED SIMULATIONS AND ALTERNATIVE SCAN/PROCESSING APPROACHES

Karpat E., Çakır M., Sevgi L.

MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.51, no.4, pp.1070-1075, 2009 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Prognostics and Health Management of Wind Energy Infrastructure Systems**  
Yuce C., Gecgel O., Dogan O., Dabetwar S., Yanik Y., Kalay O. C., Karpas E., Karpas F., Ekwaro-Osire S.  
ASCE-ASME J Risk and Uncert in Engrg Sys Part B Mech Engrg, vol.8, 2022 (ESCI)
- II. **Kargo Taşıma için İnsansız Hava Aracı**  
Demirbaş A. M., İnan B., Damyanlı E. C., Karaman O., Nurten M. C., gönül E., KARPAT E., KARPAT F.  
Mühendis ve Makine güncel, 2021 (Peer-Reviewed Journal)
- III. **A new design micropatch antenna for GPS applications on vehicle navigation systems**  
İmamoğlu F., KARPAT E.  
International Journal of Automotive Engineering and Technologies, vol.8, no.4, pp.172-177, 2019 (Peer-Reviewed Journal)
- IV. **ESTIMATING BASE STATION-BASED INDOOR AND OUTDOOR ELECTRIC FIELD LEVELS BY ARTIFICIAL NEURAL NETWORKS**  
Karpas E., Bakcan M. R., İbrahim M. M. A., Çelik B., Chabbar A. T., Doğan O.  
European Journal of Technique, vol.8, no.2, pp.1-12, 2019 (Peer-Reviewed Journal)
- V. **ELECTROMAGNETIC COMPATIBILITY EMC IN WIND TURBINES**  
Karpas E., Karpas F.  
International Journal of Industrial Electronics and Electrical Engineering,, vol.4, no.6, pp.90-93, 2016 (Peer-Reviewed Journal)
- VI. **ROUGH SURFACE ESTIMATION FOR SUBSURFACE IMAGING**  
Karpas E.  
International Journal of Advances in Engineering & Technology, vol.6, no.2, pp.737-744, 2013 (Peer-Reviewed Journal)
- VII. **Subsurface Imaging Analysis For Multiple Dielectric Objects Buried Under Homogenous Ground**  
Karpas E.  
International Journal of Advances in Engineering and Technology, vol.6, no.1, pp.12-20, 2013 (Peer-Reviewed Journal)
- VIII. **A Computer Program for Dynamic Load Simulation of Spur Gears with Asymmetric and Symmetric Teeth**  
Karpas F., Ekwaro Osire S., Karpas E.  
World Journal of Mechanics, vol.2, no.5, pp.239-245, 2012 (Peer-Reviewed Journal)
- IX. **Yüzeyaltı Görüntüleme Senaryoları için geliştirilen iki boyutlu (2B) FDTD Tabanlı Bir Simülasyon Programı**  
KARPAT E., SEVGİ L.  
Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.16, no.1, pp.95-104, 2011 (Peer-Reviewed Journal)
- X. **A Two Dimensional FDTD-Based Subsurface Imaging Simulation Tool**  
Karpas E., Sevgi L.  
Uludağ University Journal of The Faculty of Engineering, vol.16, pp.200-210, 2011 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **A Deep Learning-Based Method For Early Crack Diagnosis In Non-Standard Spur Gear Pairs**  
Kalay O. C., KARPAT F., KARPAT E., DİRİK A. E., Ekwaro Osire S.  
ASME 2023 International Mechanical Engineering Congress and Exposition, IMECE 2023, New Orleans, United States Of America, 29 October - 02 November 2023
- II. **MULTILAYER ABSORBER DESIGN USING THE BALD EAGLE SEARCH OPTIMIZATION ALGORITHM IN THE 19-37GHz FREQUENCY BAND**  
KANKILIÇ S., KARPAT E.

ASES INTERNATIONAL BANDIRMA SCIENTIFIC STUDIES CONFERENCE, 29 October 2023

III. **5G Kablosuz Haberleşme için S-Şekilli Mikroşerit Anten Tasarımı ve Analzi**

Khasiyev M., Karpaz E.

4. INTERNATIONAL MARMARA SCIENTIFIC RESEARCH AND INNOVATION CONGRESS, İstanbul, Turkey, 11 March 2023

IV. **MİKRODALGA FREKANS BANDINDA ELEKTROMANYETİK SOĞURUCU TASARIMI VE OPTİMİZASYONU**

Kankılıç S., Karpaz E.

2.INTERNATIONAL MARMARA SCIENTIFIC RESEARCH AND INNOVATION CONGRESS, İstanbul, Turkey, 19 April 2022

V. **Electromagnetic Compatibility (EMC) in Wind Turbines**

Karpaz E., Karpaz F.

IHER International Conference , Barcelona, Spain, 13 April 2016, pp.3-6

VI. **Subsurface Imaging of Dielectric Objects Buried under Rough Surface**

Karpaz E.

2nd International Conference on Research in Science Engineering and Technology (ICRSET'2014)), Dubai, United Arab Emirates, 21 - 22 March 2014, pp.133-136

VII. **Subsurface Imaging Analysis for Multiple Objects**

Karpaz E.

4th International Conference on Intelligent Systems, Modelling and Simulation (ISMS), Bangkok, Thailand, 29 - 31 January 2013, pp.195-198

## Student Project

Other, Kargo Taşıma için İnsansız Hava Aracı, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, Turkey, 2019 - 2020

## Scientific Refereeing

ULUDAĞ ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ DERGİSİ, National Scientific Refreed Journal, February 2020

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, April 2019

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, March 2019

COMPUTER APPLICATIONS IN ENGINEERING EDUCATION, SCI Journal, December 2018

## Metrics

Publication: 31

Citation (WoS): 29

Citation (Scopus): 53

H-Index (WoS): 4

H-Index (Scopus): 4

## Awards

Karpaz E., Karpaz F., TÜBİTAK 2242 Üniversite Öğrencileri Araştırma Proje Yarışmalarında İstanbul Asya Bölgesinde Savunma, Uzay ve Havacılık kategorisi birincilik, Tübitak, August 2020

## **Non Academic Experience**

Texas Tech University