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International Researcher IDs

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Education Information

Doctorate, Ataturk University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2016 - 2020

Postgraduate, Ataturk University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2013 - 2015

Undergraduate, Ataturk University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2009 - 2013

Dissertations

Doctorate, Investigation of the effects of electromagnetic waves on biological tissues by 5g smart glasses and flexible hyperthermia applicator designs, Ataturk University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2020

Postgraduate, Nörotransmitter konsantrasyon ölçümü için amperometri cihaz tasarımı ve üretimi, Ataturk University, Fen Bilimleri Enstitüsü, 2015

Research Areas

Electromagnetic, Electromagnetic in Biology and Medicine, Electromagnetic Waves, Antennas and Propagation, Passive Microwave Circuits

Academic Titles / Tasks

Assistant Professor, Ataturk University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2020 - Continues

Courses

RF Mikrodalga ve Anten Tasarımı, Postgraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Aydınlatma Tekniği, Undergraduate, 2023 - 2024, 2021 - 2022

Uygulamalı Mühendislik Eğitimi, Undergraduate, 2022 - 2023

Bilgisayar Destekli Teknik Resim, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Bilgisayar Destekli Teknik Resim, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Bilgisayar Destekli Teknik Resim, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

PCT/TR2023/051759, Undergraduate, 2022 - 2023

Biyoelektromanyetizma, Doctorate, 2022 - 2023

Aydınlatma Tekniği, Undergraduate, 2023 - 2024, 2020 - 2021
Haberleşme Laboratuvarı, Undergraduate, 2022 - 2023, 2021 - 2022
Bilgisayar Destekli Teknik Resim, Undergraduate, 2021 - 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Flexible UWB circular polarized six-port MIMO antenna for internet of medical things-based smart belts**
Geyikoğlu M. D.
Physica Scripta, vol.99, no.11, 2024 (SCI-Expanded)
- II. **Ta₄C₃ MXene-based clover-shaped patch antenna for the treatment of lung cancer with TWA**
Geyikoğlu M. D., Ertugrul M.
OPTICAL AND QUANTUM ELECTRONICS, vol.55, no.12, 2023 (SCI-Expanded)
- III. **Reconfigurable multifunctional graphene-based antenna for cancer therapy with THz wave ablation**
Geyikoğlu M. D., Polat H. K., Çavuşoğlu B., Ertuğrul M.
OPTICAL AND QUANTUM ELECTRONICS, vol.55, no.7, 2023 (SCI-Expanded)
- IV. **A novel UWB flexible antenna with dual notch bands for wearable biomedical devices**
Dilruba Geyikoglu M. D.
Analog Integrated Circuits and Signal Processing, vol.114, no.3, pp.439-450, 2023 (SCI-Expanded)
- V. **A detailed performance analysis of a novel UWB flexible monopole antenna realized with airbrush technique for different technologies**
GEYİKOĞLU M. D., ÇAVUŞOĞLU B.
FLEXIBLE AND PRINTED ELECTRONICS, vol.7, no.2, 2022 (SCI-Expanded)
- VI. **Microwave hyperthermia with X band flexible hyperthermia applicator for bone and joint cancer treatment**
GEYİKOĞLU M. D., ÇAVUŞOĞLU B.
Journal of Electromagnetic Waves and Applications, vol.36, no.9, pp.1285-1297, 2022 (SCI-Expanded)
- VII. **Non-invasive microwave hyperthermia for bone cancer treatment using realistic bone models and flexible antenna arrays**
Geyikoglu M. D., Çavuşoğlu B.
Electromagnetic Biology and Medicine, vol.40, no.3, pp.353-360, 2021 (SCI-Expanded)
- VIII. **SAR analysis of tri-band antennas for a 5G eyewear device**
Geyikoglu M. D., Koç Polat H., Kaburcuk F., Çavuşoğlu B.
INTERNATIONAL JOURNAL OF MICROWAVE AND WIRELESS TECHNOLOGIES, vol.12, no.8, pp.754-761, 2020 (SCI-Expanded)
- IX. **Modeling and validation of a new reconfigurable patch antenna through equivalent lumped circuit-based design for minimum tuning effort**
Koc Polat H., Geyikoglu M. D., Çavuşoğlu B.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.62, no.6, pp.2335-2345, 2020 (SCI-Expanded)
- X. **Novel design for differential phase shifter structure by using multi-section coupled lines**
Geyikoglu M. D., Koc Polat H., ÇAVUŞOĞLU B.
ELECTRONICS LETTERS, vol.56, no.11, pp.553-555, 2020 (SCI-Expanded)

Articles Published in Other Journals

- I. **Sıçanlarda tüm vücut PEMF cihaz etkisi için in-silico çalışma**
Geyikoğlu M. D.
Gümüşhane Üniversitesi Fen Bilimleri Dergisi, vol.14, no.1, pp.313-324, 2024 (Peer-Reviewed Journal)

- II. **Designing Graphene-Based Antenna for Terahertz Wave Ablation (TWA) System**
GEYİKOĞLU M. D., KOÇ POLAT H., ÇAVUŞOĞLU B., ERTUĞRUL M., Abbasian K.
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.15, no.2, pp.507-514, 2022 (Peer-Reviewed Journal)
- III. **A Novel Approach for Production Challenges of Flexible Microstrip Patch Antenna**
Koç H., Geyikoğlu M. D., Çavuşoğlu B., Ertuğrul M.
Brilliant Engineering, vol.1, no.1, pp.7-12, 2020 (Peer-Reviewed Journal)
- IV. **Experimental and computational analysis of the effects of tri-band antennas of wearable smart glasses**
GEYİKOĞLU M. D., KABURCUK F., ÇAVUŞOĞLU B.
Progress In Electromagnetics Research C, vol.95, pp.91-105, 2019 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **An Efficient Detection Model for Brain Stroke Based on Transfer Learning**
Mohammed F. H. M., Alawi A. E. B., BOZKURT F., GEYİKOĞLU M. D.
2024 4th International Conference on Emerging Smart Technologies and Applications (eSmarTA), Yemen, 06 August 2024
- II. **The Feasibility Study of Hyperthermia with a Novel Flexible Antenna for Bone Cancer in the Rat**
Geyikoğlu M. D., Koç Polat H.
4th International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 28 - 30 September 2022, pp.267-272
- III. **A Singular-Feed Circularly Polarized Metasurface Antennas Using Characteristic Mode Analysis**
Geyikoğlu M. D., Koç Polat H.
5th International Symposium on Innovative Approaches in Smart Technologies , Konya, Turkey, 28 - 29 May 2022, pp.49-52
- IV. **The Comparison of Performance Analysis of Mxene and Graphene-Based Antennas for Wearable Technologies**
Geyikoğlu M. D., Koç Polat H.
1st International Conference on Engineering and Applied Natural Sciences, Konya, Turkey, 10 - 13 May 2022, pp.1498-1502
- V. **Design of Flexible Antennas for Mobile Communication and 5G Application**
KOÇ POLAT H., Geyikoğlu M. D., ÇAVUŞOĞLU B.
International Conference on Advances in Engineering, Architecture, Science and Technology (ICA-EAST 2021), Erzurum, Turkey, 15 December 2021
- VI. **Eşdeğer Devre Tabanlı Yaklaşım ile Yeniden Yapılandırılabilir Esnek Mikroserit Yama Anteni Tasarımı**
KOÇ POLAT H., GEYİKOĞLU M. D., ÇAVUŞOĞLU B.
X. URSI-TÜRKİYE 2021 BİLİMSEL KONGRESİ, Gebze, Turkey, 07 September 2021
- VII. **The flexible antennas using silver paste with micro particles**
KOÇ H., Geyikoğlu M. D., ÇAVUŞOĞLU B.
5th International Electromagnetic Compatibility Conference, EMC Türkiye 2019, Kocaeli, Turkey, 22 - 25 September 2019
- VIII. **A new flexibleantenna array design for hyperthermia treatment of bone cancer**
Geyikoğlu M. D., KOÇ H., ÇAVUŞOĞLU B.
5th International Electromagnetic Compatibility Conference, EMC Türkiye 2019, Kocaeli, Turkey, 22 - 25 September 2019
- IX. **A microstrip patch antenna operation on cylindrical structures based on silicon rubber Silisyum Kauçuk Tabanlı Silindir Yapılar Üzerine Mikroserit Yama Anteni Çalışması**
Koc H., Geyikoglu M. D., Kaburcuk F., ÇAVUŞOĞLU B., ERTUĞRUL M.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, İzmir, Turkey, 2 - 05 May

2018, pp.1-4

- X. **A microstrip patch antenna operation on cylindrical structures based on silicon rubber**
KOÇ POLAT H., GEYİKOĞLU M. D., KABURCUK F., ÇAVUŞOĞLU B., ERTUĞRUL M.
26th IEEE Signal Processing and Communications Applications Conference, SIU 2018, 02 May 2018
- XI. **A Microstrip Patch Antenna Operation on Cylindrical Structures Based on Silicon Rubber**
Koc H., GEYİKOĞLU M. D., KABURCUK F., ÇAVUŞOĞLU B., ERTUĞRUL M.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- XII. **Ybco Metamaterials Fabricated By Screen Printing Method**
ÖZMEN A., COŞKUN A., AKSOY M. A., GEYİKOĞLU M. D., ERTUĞRUL M.
International Conference On Condensed Matter And Materials Science-2017 (icmms-17), Adana, Turkey, 11 - 15 October 2017, pp.83
- XIII. **Improving The Performance Of Ybco Superconducting Microwave Resonator**
COŞKUN A., ÖZMEN A., AKSOY M. A., GEYİKOĞLU M. D., ERTUĞRUL M.
International Conference On Condensed Matter And Materials Science-2017 (icmms-17), Adana, Turkey, 11 - 15 October 2017, pp.82
- XIV. **Shielding Effectiveness Analysis Of Transparent Oxide Coated Glass**
AKSOY M. A., ÖZMEN A., COŞKUN A., GEYİKOĞLU M. D., ERTUĞRUL M.
International Conference On Condensed Matter And Materials Science-2017 (icmms-17), Adana, Turkey, 11 - 15 October 2017, pp.115
- XV. **The Effect of Bazal Noise Reduction Method for Improving the Limit of Detection LOD of the Microsensor on In Vivo Neurotransmitter Analysis**
KOÇ H., GÜLŞAH K., GEYİKOĞLU M. D., MUHAMMET EMİN D., ACAR M., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., et al.
ELECTROTECH 2015, 2 - 04 November 2015
- XVI. **Improving the limit of detection (LOD) of microsensor used in detection of brain diseases via wavelet filter** **Beyin Hastalıklarının Tanısında Kullanılan Mikrosensörün Dalgacık Filtre Kullanılarak Algılama Alt Sinirinin İyileştirilmesi**
Koc H., Kadihasanoglu G., Geyikoglu M. D., DERTLİ M. E., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., KARACALI T., et al.
2015 23rd Signal Processing and Communications Applications Conference, SIU 2015, Malatya, Turkey, 16 - 19 May 2015, pp.1676-1679

Supported Projects

ÇAVUŞOĞLU B., ÖZBEK İ. Y., GÜNAY F. B., TURAY T., ÖNAL N., ORAL E. A., GEYİKOĞLU M. D., ÖMEROĞLU A. N., ERTAŞ S., KORKMAZ O. E., Project Supported by Higher Education Institutions, Yapay Zeka ile Güçlendirilmiş 5G Ötesi/6G Haberleşme Sistemleri, 2024 - Continues

Yağanoğlu M., Şansveren M. F., Geyikoğlu M. D., Gültepe Y., Kollu S., Kaya Topdağı S., Project Supported by Higher Education Institutions, Yapay Zeka Destekli Giyilebilir NST Kemerleri, 2024 - 2026

İPEK ÇOBAN G., BOZKURT T., GEYİKOĞLU M. D., Project Supported by Higher Education Institutions, Çok Amaçlı Klemp Cihazı, 2023 - 2024

GEYİKOĞLU M. D., ÇAVUŞOĞLU B., Project Supported by Higher Education Institutions, Kemik Kanseri Nonİnvazif Hipertermi Tedavisinde Kullanılmak Üzere Esnek Hipertermi Aplikatörü ve Uygulama Sistemi, 2023 - 2024

GEYİKOĞLU M. D., ÖZTÜRK G., ABBASIAN K., KOÇ POLAT H., HASAR U. C., ERTUĞRUL M., ÇAVUŞOĞLU B., Project Supported by Higher Education Institutions, Kanser Tedavisi İçin Terahertz Dalga Ablasyon TWA Sistemi, 2023 - 2024

GÜLTEPE Y., KOÇ G., GEYİKOĞLU M. D., YAĞANOĞLU M., GÜNAY F. B., Project Supported by Higher Education Institutions, Nefes al Nefes ver Komutlu Uyarıcı Maske ve Vibrasyon Yeleği, 2022 - 2024

Geyikoğlu M. D., TUBITAK Project, IoMT Tabanlı Akıllı Kemerlerde Kullanılmak Üzere Esnek UWB Dairesel Polarizasyonlu MIMO Anten Üretimi ve Antenin Dokular Üzerinde Oluşturacağı Elektromanyetik Radyasyon Maruziyet (SAR) Değerinin Simülasyonu ve Deneysel Ortamda İncelenmesi, 2022 - 2024

KANBUR A., ÇAVUŞOĞLU B., EJDER APAY S., ÇOBAN Ö., GEYİKOĞLU M. D., Project Supported by Higher Education Institutions, Doğum Sürecinde Amniyotik Mayide Non-Invaziv Mekonyum ve Kan Tarama Cihazı Geliştirilmesi, 2022 - 2024

GEYİKOĞLU M. D., CEYLAN İ., ÖZEN A. K., Project Supported by Higher Education Institutions, Kompakt Pulsatif Elektromanyetik Alan Cihazı İle Ortodontik Tedavi, 2021 - 2024

Ertuğrul M., Geyikoğlu M. D., Öztürk G., Çavuşoğlu B., Hasar U. C., Parlak E., Koç Polat H., TÜBİTAK International Bilateral Joint Cooperation Program Project, Terahertz Dalga Ablasyon (Twa) Sistemi: İn Vivo Kanser ve Tümör Tedavisi İçin Fizibilite Değerlendirmesi ve Tasarımı, 2021 - 2023

Geyikoğlu M. D., Tortumluoğlu H., Çom Y. S., Tortumluoğlu İ., Akyüz Y., Project Supported by Higher Education Institutions, Teknofest İnsansız Sualtı Sistemlerinde Görüntü İşleme Kullanılarak Otonom Görevleri Yerine Getirme, 2021 - 2022

Ertuğrul M., Hasar U. C., Tuzluca Yeşilbağ F. N., Yeşilbağ Y. Ö., Öztürk G., Geyikoğlu M. D., TUBITAK Project, Fabrication and Analysis of a New Ultra-Broadband Hybrid Microwave Absorber for Radar Cross-Section Reduction, 2019 - 2022

Patent

Gültepe Y., Geyikoğlu M. D., Yağanoğlu M., Günay F. B., Koç G., WARNING MASK AND VIBRATION VEST WITH INHALE AND EXHALE COMMANDS, Patent, CHAPTER A Human Needs, The Invention Recourse Number: PCT/TR2023/051759 , Standard Registration, 2023

Kanbur A., Ejder Apay S., Çoban Ö., Geyikoğlu M. D., Çavuşoğlu B., Non-invasive Meconium and Blood Screening Device in Amniotic Fluid During The Birth Process, Patent, CHAPTER A Human Needs, The Invention Recourse Number: TR2023/050916 , Standard Registration, 2023

İpek Çoban G., Geyikoğlu M. D., Bozkurt T., Patent, CHAPTER A Human Needs, The Invention Recourse Number: TFM-2023-13400 , Standard Registration, 2023

Geyikoğlu M. D., Özen A. K., Ceylan İ., ORTODONTİK TEDAVİ AMAÇLI KOMPAKT PULSATİF ELEKTROMANYETİK ALAN CİHAZI, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 2022/003445 , Standard Registration, 2022
Gültepe Y., Geyikoğlu M. D., Yağanoğlu M., Günay F. B., NEFES AL NEFES VER KOMUTLU UYARICI MASKE VE VİBRASYON YELEĞİ, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 2022/021598 , Standard Registration, 2022

Kanbur A., Ejder Apay S., Çoban Ö., Geyikoğlu M. D., Çavuşoğlu B., DOĞUM SÜRECİNDE AMNİYOTİK MAYİDE NON-İNVAZİV MEKONYUM VE KAN TARAMA CİHAZI, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 2022/014016 , Standard Registration, 2022

Hacımüftüoğlu A., Çavuşoğlu B., Özbek İ. Y., Oral E. A., Geyikoğlu M. D., Okkay U., (Almanya Başvurusu) NEUROTRANSMİTTER MONİTORİNG AND TREATMENT DEVICE, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 18902764.2 , Standard Registration, 2021

Hacımüftüoğlu A., Çavuşoğlu B., Özbek İ. Y., Efeoğlu H., Karacalı T., Oral E. A., Geyikoğlu M. D., Okkay U., (Çin Başvurusu) Neurotransmitter monitoring and treatment device, Patent, CHAPTER A Human Needs, The Invention Recourse Number: 111093478 , Standard Registration, 2020

Hacımüftüoğlu A., Çavuşoğlu B., Özbek İ. Y., Okkay U., Efeoğlu H., Oral E. A., Geyikoğlu M. D., (Hindistan Başvurusu) Neurotransmitter monitoring and tretment device, Patent, CHAPTER A Human Needs, The Invention Recourse Number: India 202017008882 , Standard Registration, 2020

Hacımüftüoğlu A., Çavuşoğlu B., Efeoğlu H., Özbek İ. Y., Oral E. A., Karacalı T., Sağsöz M. E., Okkay U., Ertuğrul M., Geyikoğlu M. D., Neurotransmitter Monitoring and Treatment Device, Patent, CHAPTER A Human Needs, The Invention Recourse Number: PCT/TR2018/050416 , Standard Registration, 2019

Scientific Refereeing

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