

# ÖZGEÇMİŞ VE ESERLER LİSTESİ

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**Doğum Tarihi:** 21.12.1980

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**İş Adresi:** İzmir Katip Çelebi Üniversitesi, Balatçık Mahallesi Havaalanı Şosesi No:33/2 Balatçık 35620 Çiğli  
İzmir

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## Uzmanlık Alanı:

Derece	Alan	Universite	Yıl
Lisans	Elektrik-Elektronik Mühendisliği	Çukurova Üniversitesi	2002
Yüksek Lisans	Mikrosytems and Microelectronics Engineering	Technische Universitaet Hamburg	2005
Doktora	Theoretische Elektrotechnik	Technische Universitaet Berlin	2012

## Yüksek Lisans Tezi Başlığı ve Danışmanı :

Numerical Investigation of Photoelastic Effect for Tunable Optical Components, Prof. Dr-Ing. Manfred Kasper, Hamburg Teknik Üniversitesi

## Doktora Tezi Başlığı ve Danışmanı :

Microwave Metamaterials for Compact Filters and Antennas, Prof.Dr-Ing .Heino Henke, Berlin Teknik Üniversitesi

## Görevler:

Görev Unvanı	Görev Yeri	Yılı
Araştırma Görevlisi	Theoretische Elektrotechnik, Technische Universitaet Berlin	05.2006-05.2011
Araştırmacı	Photonic and Plasmonic Research Group, Technische Universitaet Berlin	05.2011-05.2013
Yardımcı Doçent	Elektrik-Elektronik Mühendisliği, Gediz Üniversitesi	10.2013-07.2014
Yardımcı Doçent	Elektrik-Elektronik Mühendisliği, İzmir Katip Çelebi Üniversitesi	09.2014-10.2017
Doçent	Üniversiteler Arası Kurul Başkanlığı	10.2017-

## **Yönetilen Yüksek Lisans Tezleri :**

RF enerji hasatlama uygulamaları için kompakt doğrultucu anten (rectenna) tasarımı (2019)

Mikrodalga ablasyon sistem uygulamaları için mikroışlemci tabanlı sıcaklık sensörü ile RF prop tasarımı (2019)

Biyomedikal Telemetri Sistemleri için MICS Bandında Biyouyumlu İmplant Edilebilir Anten Tasarımı (2021)

## **Projelerde Yaptığı Görevler:**

### **2011-2013**

#### **Alt-Terahertz Dalga Frekanslarında Yüksek Hızlı Kablosuz Haberleşme için Entegre Fotonik Transceiver Tasarımı**

P7 ICT-5-3.9 Avrupa Birliği Projesi, iPHOS,  
Bilimsel Araştırmacı, Berlin Teknik Üniversitesi, Berlin, ALMANYA

### **2014-2016**

#### **Meta-Malzeme Tabanlı Antenler Kullanılarak Çevresel Elektromanyetik Dalgalardan Enerji Üretme Tekniklerinin Araştırılması**

TUBİTAK 2232 Yurda Dönüş Araştırma Burs Programı,  
Yürütücü, İzmir Katip Çelebi Üniversitesi

### **2015-2017**

#### **Grafen Elektronik Malzeme Sentezi, Bant Aralığı Mühendisliği Ve Şeffaf İletken Film Alanında Uygulanması**

Öncelikli Alan Araştırma Projesi,  
Bilimsel Araştırmacı, İzmir Katip Çelebi Üniversitesi

### **2017-2019**

#### **Şekil Hafızalı Malzeme (Niti) İle Modüler Dual Band Yüksek Kazançlı Mimo Wifi Metal Anten Tasarımı Ve Alıcı-Verici Birimlerin Beyaz Eşya Uygulamalarına Yönelik Olarak Geliştirilmesi**

TUBİTAK 1505,  
Bilimsel Araştırmacı, İzmir Katip Çelebi Üniversitesi

### **2018-2020**

#### **Akıllı Alaşımlar (Sma) İle Anten-Aplikatör Tasarımları Ve Çoklu Sensor Takımları Kullanılarak Darbeli Elektromanyetik Alan Cihazı Tasarımı Ve Metastatik Meme Kanserinde Tedavi Ve Ağrı Azaltmaya Yönelik Etkilerin İncelenmesi**

TUBİTAK 1001,  
Bilimsel Araştırmacı, İzmir Katip Çelebi Üniversitesi

## **İdari Görevler:**

Akıllı Fabrika Sistemleri Araştırma Uygulama Merkezi Müdür Yardımcılığı  
Yapay Zeka ve Veri Bilimi Araştırma Uygulama Merkezi Müdür Yardımcılığı

## Bilimsel Kuruluşlara Üyelikler:

IEEE

## Ödüller / Burslar:

- Tübitak BİDEB-2232 Geri Dönüş Bursu, 2013-2015
- DAAD-TEV ortak yurtdışı yüksek lisans burs programı, 2003
- Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi birinciliği, 2002
- Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Elektrik Elektronik Mühendisliği birinciliği, 2002

## Son iki yılda verdiği lisans ve lisansüstü düzeyindeki dersler:

Akademik Yıl	Dönem	Dersin Adı	Haftalık Saati		Öğrenci Sayısı
			Teorik	Uygulama	
2019-2020	Güz	Elektromanyetik Teori	3	0	90
		Mikrodalga Tekniği	3	0	15
		Mikrodalga Mühendisliği	3	0	5
	Bahar	Elektromanyetik Dalgalar	3	0	80
		Yüksek Frekans Tekniği	3	0	15
		İleri Elektromanyetik Dalgalar	3	0	5
2020-2021	Güz	Elektromanyetik Teori	3	0	90
		Mikrodalga Tekniği	3	0	15
		Mikrodalga Mühendisliği	3	0	5
	Bahar	Elektromanyetik Dalgalar	3	0	80
		Yüksek Frekans Tekniği	3	0	15
		Antenlerde Sayısal Yöntemler	3	0	5
		İleri Elektromanyetik Dalgalar	3	0	5

## **ESERLER:**

### **A. Uluslararası hakemli dergilerde yayınlanan makaleler (SCI & SSCI & Arts and Humanities)**

- 1-) M. Palandöken, M. Aksoy und M. Tümay, "A fuzzy-controlled single-phase active power filter operating with fixed switching frequency for reactive power and current harmonics compensation", **Electrical Engineering, Volume 86, Number 1, pp.9-16, 2003**
- 2-) Merih Palandöken, Murat Aksoy and Mehmet Tümay, "Application of fuzzy logic controller to active power filters", **Electrical Engineering, Vol: 86, No:4, pp. 191-198, 2004**
- 3-) Merih Palandöken, Mehmet Tümay and Murat Aksoy, "A novel approach to active power filter control", **Electrical Engineering, Vol: 87, No: 1, pp.33-39, 2005**
- 4-) Merih Palandöken, Andre Grede, and Heino Henke, "Broadband Microstrip Antenna With Left-Handed Metamaterials", **IEEE Transactions on Antennas and Propagation, Vol.57, No. 2, pp. 331-338, 2009**
- 5-) J. Montero-de-Paz, I. Oprea, V. Rymanov, S. Babel, L.E. Garcia-Munoz, A. Lisauskas, M. Hoefle, A. Jimenez, O. Cojocari, D. Segovia-Vargas, Merih Palandöken, T. Tekin, A. Stöhr, G. Carpintero, "Compact Modules for Wireless Communication Systems in the E-band (71-76 GHz)", **Springer, Journal of Infrared, Millimeter, and Terahertz Waves, vol. 34, no. 2, pp. 1 -16, 2013**
- 6-) Merih Palandöken, Adnan Sondas, "Compact Metamaterial Based Band-Stop Filter", **Microwave Journal, Volume: 57 Issue: 10 Pages: 76-84, Oct 2014**
- 7-) Merih Palandöken, Mustafa H.B. Uçar, "Compact Metamaterial-inspired Band-Pass Filter", **Microwave And Optical Technology Letters, Volume: 56 Issue: 12 Pages: 2903-2907, Dec 2014**
- 8-) T.K.Upadhyaya, Shiv Prasad Kosta, Rajeev Jyoti, Merih Palandöken, "Negative refractive index material inspired 900 electrically tilted ultra wideband resonator", **Optical Engineering 53(10) 107104, Optical Engineering, Volume 53, Issue 10, Oct. 2014, DOI: 10.1117/1.OE.53.10.107104**
- 9-) Trushit K. Upadhyaya, Shiv Prasad Kosta, Rajeev Jyoti and Merih Palandöken, "Novel stacked  $\mu$ -negative material-loaded antenna for satellite applications", **International Journal of Microwave and Wireless Technologies, Volume: 8 Issue: 2 Pages:229-235, Mar. 2016**
- 10-) Merih Palandöken, "Microstrip antenna with compact anti-spiral slot resonator for 2.4 GHz energy harvesting applications", **Microwave And Optical Technology Letters, Volume: 58 Issue: 6 Pages: 1404-1408, June 2016, DOI: 10.1002/mop.29824**
- 11-) Merih Palandöken, "Dual broadband antenna with compact double ring radiators for IEEE 802.11 ac/b/g/n WLAN communication applications", **Turkish Journal of Electrical Engineering & Computer Sciences, vol.25, Pages: 1326-1333, 10.04.2017, DOI:10.3906/elk-1507-121**
- 12-) Merih Palandöken, "Compact Bioimplantable MICS and ISM Band Antenna Design for Wireless Biotelemetry Applications", **Radioengineering Journal, vol. 26, no.4, December 2017**
- 13-) Merih Palandöken, C. Gocen, A. Kaya, F. Gunes, C. Baytore, F.C Can, "A Novel Split-Ring Resonator and Voltage Multiplier based Rectenna Design for 900 MHz Energy Harvesting Applications", **Radioengineering Journal, Vol. 27, Issue: 3, September 2018**
- 14-) Kanwar Preet Kaur, Trushit Upadhyaya, Merih Palandöken, "Dual-Band Compact Metamaterial-Inspired Absorber with Wide Incidence Angle and Polarization Insensitivity for GSM and ISM Band Applications", **Radioengineering Journal, Vol. 27, Issue. 4, December 2018**
- 15-) Arpan Desai, Trushit Upadhyaya, Merih Palandöken, "Dual Band Slotted Transparent Resonator for WLAN Applications", **Microwave And Optical Technology Letters, 2018 Volume 60, Issue 12 December 2018, pages 3034-3039**

16-)R Patel, T Upadhyaya, A Desai, Merih Palandoken, "Low Profile Multiband Meander Antenna for LTE/WiMAX/WLAN and INSAT-C Application", **AEU-International Journal of Electronics and Communications**, Vol. 102, April 2019, Pages 90-98

17-)A Desai, T Upadhyaya, Merih Palandoken, C Gocen, "Dual band transparent antenna for wireless MIMO system applications", **Microwave and Optical Technology Letters**, Volume 61, Issue7, July 2019, Pages 1845-1856

18-)KP Kaur, T Upadhyaya, Merih Palandoken, C Gocen, "Ultrathin dual layer triple band flexible microwave metamaterial absorber for energy harvesting applications", **International Journal of RF and Microwave Computer Aided Engineering**, vol.29, no. 1, Jan 2019

19-)Merih Palandoken, C Gocen, "A modified Hilbert fractal resonator based rectenna design for GSM900 band RF energy harvesting applications", **International Journal of RF and Microwave Computer Aided Engineering**, vol.29, no. 1, Jan 2019

20-)Desai, A., Upadhyaya, T., Palandoken, Merih, J. Patel, R. Patel, "Transparent Conductive Oxide-Based Multiband CPW Fed Antenna", **Wireless Personal Communications (2020)**. <https://doi.org/10.1007/s11277-020-07262-w>

21-)A. Desai, T. Upadhyaya, J. Patel, R. Patel, Merih Palandoken, "Flexible CPW fed transparent antenna for WLAN and sub-6 GHz 5G applications", **Microwave And Optical Technology Letters**, Volume 62, Issue 5, May 2020 <https://doi.org/10.1002/mop.32287>

22-)M. A. Belen, P. Mahouti, Merih Palandoken, "Design and realization of novel frequency selective surface loaded dielectric resonator antenna via 3D printing technology", **Microwave And Optical Technology Letters**, Volume 62, Issue 5, May 2020, <https://doi.org/10.1002/mop.32245>

23-)M. Mahouti N. Kuskonmaz, P. Mahouti, M. A. Belen, Merih Palandoken, "Artificial neural network application for novel 3D printed nonuniform ceramic reflectarray antenna." **International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (2020): e2746**.

24-)Belen, A., Güneş, F., Mahouti, P., Palandoken, M. "A novel design of high performance multilayered cylindrical dielectric lens antenna using 3D printing technology", **International Journal of RF and Microwave Computer-Aided Engineering**, 30(1), (2020) e21988.

25-)Murat, Caner, Merih Palandoken, Irfan Kaya, Adnan Kaya, "A novel ISM band reflector type applicator design for microwave ablation systems." **Electromagnetic Biology and Medicine (2021): 1-15**.

26-)Mehmet Belen, Filiz Günes, İlhan Ö. Evranos, Peyman Mahouti, Merih Palandoken "A compact triband antipodal Vivaldi antenna with frequency selective surface inspired director for IoT/WLAN applications", **Wireless Networks, Springer,(2021)**

#### **B. Uluslararası bilimsel toplantılarda sunulan ve bildiri kitabında (Proceedings) basılan bildiriler**

1-)Merih Palandoken, H. Henke, "Fractal Spiral Resonator as Magnetic Metamaterial", **IEEE Applied Electromagnetics Conference (AEMC)**, pp. 1-4, 2009

2-)Merih Palandoken, H. Henke, "Fractal Negative-Epsilon Metamaterial", **IEEE International Workshop on Antenna Technology (iWAT)**, pp. 1-4, 2010

3-)Merih Palandoken, Heino Henke, "Compact LHM-based Band-Stop Filter", **IEEE Mediterranean Microwave Symposium (MMS)**, pp. 229-231, 2010

- 4-)B. Bouhlal, S. Lutzmann, Merih Palandöken, V. Rymanov, A. Stöhr, T. Tekin, "Integration platform for 72 GHz photodiode-based wireless transmitter", **SPIE Photonics West 2012, San Francisco, Jan. 21-26, Proc. SPIE 8259, 82590H, 2012**
- 5-)V. Rymanov, S. Babiél, A. Stöhr, S. Lutzmann, Merih Palandöken, B. Bouhlal, T. Tekin, "Integrated E- Band Photoreceiver Module for Wideband (71-76 GHz) Wireless Transmission", **European Microwave Week 2012, European Microwave Conference, EUMC 2012, Amsterdam, The Netherlands, 29 October – 1 November, paper no. 1751, pp. 983 – 986, 2012**
- 6-)V. Rymanov, S. Lutzmann, Merih Palandöken, T. Tekin, A. Stöhr, "Wideband 1.55  $\mu\text{m}$  Waveguide Photodiodes Employing Planar Resonant Circuits for E-band (60-90 GHz) Operation", **Progress In Electromagnetics Research Symposium, PIERS 2012, Moscow, Russia, 19-23 August, pp. 403- 406, 2012**
- 7-)V. Rymanov, Merih Palandöken, S. Lutzmann, B. Bouhlal, T. Tekin, A. Stöhr, "Integrated Photonic 71-76 GHz Transmitter Module Employing High Linearity Double Mushroom Type 1.55  $\mu\text{m}$  Waveguide Photodiodes", **IEEE International Topical Meeting on Microwave Photonics, MWP 2012, Noordwijk, The Netherlands, 11-14 September, paper no. 2594588, pp. 253 – 256, 2012**
- 8-) Merih Palandöken, Sascha Lutzmann, Vitaly Rymanov, Andreas Stöhr, and Tolga Tekin, "Grounded CPW -W R12 Transition Design for 1.55  $\mu\text{m}$  Photodiode Based E-band Transmitter", **PIERS 2012, Moscow, Russia, August 19-23, pp. 1245-1248, 2012**
- 9-) Merih Palandöken, Vitaly Rymanov, Andreas Stöhr, and Tolga Tekin, "Compact Metamaterial-based Bias Tee Design for 1.55  $\mu\text{m}$  Waveguide-photodiode Based 71-76 GHz Wireless Transmitter", **PIERS 2012, Moscow, Russia, August 19-23, pp. 393-397, 2012**
- 10-) Rymanov, V., Lutzmann, S., Palandöken Merih, Tekin, T., Stöhr, A. "Wideband 1.55  $\mu\text{m}$  waveguide photodiodes employing planar resonant circuits for E-band (60-90 GHz) operation", **Progress in Electromagnetics Research Symposium 2012, pp. 403-406**
- 11-)V. Rymanov, S. Dülme, M. Wachholz, Merih Palandöken, T. Tekin, A. Stöhr, "Integrated  $\Psi$ -Type Photonic Polarization Diversity Receivers for Wireless Radio-over-Fiber Communication Links", **46th International Symposium on Microelectronics, iMAPS, Sep. 29 - Oct. 3, Orlando, Florida, USA, pp. 213-216, 2013**
- 12-) V. Rymanov, Merih Palandöken, S. Dülme, T. Tekin, A. Stöhr, "Compact Photonic Package for High- Power E-band (60-90 GHz) Photoreceiver Modules", **46th International Symposium on Microelectronics, iMAPS, Orlando, Florida, USA, pp 883-886, 2013**
- 13-) Palandöken Merih, Tekin, T. "Integration platform of dual wavelength signal source for 120GHz wireless communication systems"(2013) **Proceedings of the 13th International Conference of the European Society for Precision Engineering and Nanotechnology, EUSPEN 2013, 1, pp. 47-50.**
- 14-) Tcheg, P., Wang, B., Palandöken Merih, Tekin, T. "Photonic flip-flop based solutions to overcome memory-wall challenges"(2013) **Proceedings of the 13th International Conference of the European Society for Precision Engineering and Nanotechnology, EUSPEN 2013, 1, pp. 39-42.**
- 15-) Baytore, C., Palandöken Merih, Kaya, A. ; Zoral, Y., " Compact multiband MIMO antenna designs and analysis for 2.4/5.2/5.8 GHz WLAN MIMO systems", **23th Signal Processing and Communications Applications Conference (SIU), pp 2082 – 2085, 2015**
- 16-) Baytore, C., Ozgonul, M.C., Palandöken Merih, Ozbakis, B., Kaya, A. ," Low cost dual band monopole antenna design and analysis for 802.11 b/g/n/ac standards", **23th Signal Processing and Communications Applications Conference (SIU), pp 2070 - 2073, 16-19 May 2015**
- 17-) Merih Palandöken, Cem Baytöre, Adnan Kaya, "Compact WLAN Monopole Antenna with L-shaped Strip Line and Spiral Line Loaded Ring Resonator", **Proceedings of the 2nd World Congress on Electrical Engineering and Computer Systems and Science (EECSS'16), Budapest, Hungary , August 16 -17, 2016 Paper No. EEE 139, DOI: 10.11159/eee16.139**

18-) Adnan Kaya, Cem Baytöre, Merih Palandöken, Irfan Kaya, Basak Ozbakis, "A Dual-Band MIMO Monopole Antenna System for Set Top Box and WLAN Chipsets", **Proceedings of the 2nd World Congress on Electrical Engineering and Computer Systems and Science (EECSS'16)**, Budapest, Hungary, August 16– 17, 2016 Paper No. EEE 140, DOI: 10.11159/eeec16.140

19-) Cem Baytöre, Merih Palandöken, Adnan Kaya, "Shape Memory Alloy NITI Antenna With WiFi Application", Abu Dhabi, **16th Mediterranean Microwave Symposium, November 14-16, 2016**

20-) Cem Baytöre, EY Zoral, C Göçen, Merih Palandöken, A Kaya, "Coplanar flexible antenna design using conductive silver nano ink on paper substrate for wearable antenna applications", **28th International Conference Radioelektronika (RADIOELEKTRONIKA), 2018, 1-6**

21-) KP Kaur, T Upadhyaya, Merih Palandöken, "Ultrathin wideband polarization independent compact metamaterial microwave absorber", Radioelektronika (RADIOELEKTRONIKA), **28th International Conference Radioelektronika (RADIOELEKTRONIKA), 2018, 1-6**

22-) Caner Murat, Merih Palandöken, Adnan Kaya, Irfan Kaya, "A Helically Shaped With Open Ended Reflector Probe Design For ISM Band Microwave Ablation System", **AES 2019, LISBON - PORTUGAL, July 24 – 26, 2019**

23-) Caner Murat, Merih Palandöken, Adnan Kaya, Irfan Kaya, "A Helically Shaped With Closed Ended Reflector Probe Design For ISM Band Microwave Ablation System", **AES 2019, LISBON- PORTUGAL, July 24 – 26, 2019**

24-) Akdağ, İ., Göçen, C., Palandöken, M., Kaya, A. "Estimation of the Scattering Parameter at the Resonance Frequency of the UHF Band of the E-Shaped RFID Antenna Using Machine Learning Techniques." **2020 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT). IEEE, 2020.**

25-) Göçen, C., Akdağ, İ., Palandöken, M., Kaya, A. (2020, October). "2.4/5 GHz WLAN 4x4 MIMO Dual Band Antenna Box Design for Smart White Good Applications." **2020 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT) (pp. 1-5). IEEE.**

26-) Caglar Gurkan, Merih Palandöken, "Machine Learning Approaches to Sentiment Analysis Using Tweets About AstraZeneca COVID-19 Vaccine", **5th International Conference on Computational Mathematics and Engineering Sciences, 8-10. June 2021**

27-) Gürkan, Çağlar; Palandöken, Merih; "FaceRecog-Net: Development of Real Time Manufacturing Employee Tracking System with Face Recognition Feature Based on Deep Learning Algorithms for Android Mobile Systems", **ICENSS, 2021**

#### **C. Ulusal bilimsel toplantılarda sunulan bildiri kitabında basılan bildiriler**

1-) Baytöre C., Palandöken M., Kaya A., Zoral Y., "Compact multiband MIMO antenna designs and analysis for 2.4/5.2/5.8 GHz WLAN MIMO systems", **23th Signal Processing and Communications Applications Conference (SIU), pp 2082 – 2085, 2015**

2-) Baytöre C., Ozgonul, M.C., Palandöken, M., Ozbakis, B., Kaya, A., "Low cost dual band monopole antenna design and analysis for 802.11 b/g/n/ac standards", **23th Signal Processing and Communications Applications Conference (SIU), pp 2070 - 2073, 16-19 May 2015**

#### **D. Yazılan uluslararası kitaplar veya kitaplarda bölümler**

1-) Merih Palandöken, "Artificial Materials based Microstrip Antenna Design", in "Microstrip Antennas", **ISBN 978-953-307-247-0, InTech, 2011**

2-) Merih Palandöken, "Metamaterial-Based Compact Filter Design", in "Metamaterial" ,**ISBN 978-953-51-0591-6, InTech, 2011**

3-) Trushit Upadhyaya, Killol Pandya, Arpan Desai, Upesh Patel, Rajat Pandey, Merih Palandöken, (2022), Multiband Laptop Antenna with enhanced bandwidth for WLAN / WiMAX / GPS Wireless Applications in **Smart Antenna: Latest Trends in Design and Application, Springer**,