

# **Prof. UĞUR YALÇIN**

## **Personal Information**

**Email:** uyalcin@uludag.edu.tr  
**Web:** <https://avesis.uludag.edu.tr/uyalcin>

## **International Researcher IDs**

ORCID: 0000-0002-4160-9774  
Publons / Web Of Science ResearcherID: AAG-8951-2021  
ScopusID: 16023664100  
Yoksis Researcher ID: 156567

## **Education Information**

Doctorate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektronik Mühendisliği (Dr), Turkey 1997 - 2004  
Postgraduate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektronik Mühendisliği (Yıl) (Tezli), Turkey 1995 - 1997  
Undergraduate, Bursa Uludağ University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1991 - 1995

## **Foreign Languages**

English, B2 Upper Intermediate

## **Research Areas**

Electrical and Electronics Engineering, Microwave Circuits, Optics and Photonics, Electromagnetic, Wave Propagation and Remote Sensing, Electric and Magnetic Fields, Electromagnetic Band Spacing Structures, Electromagnetic Waves, Antennas and Propagation, Planar Buildings, MEMS, Lasers and Masers, Optical Materials and Devices, Engineering and Technology

## **Academic Titles / Tasks**

Associate Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2015 - Continues  
Assistant Professor, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2008 - 2015  
Lecturer PhD, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 2004 - 2008  
Research Assistant, Bursa Uludağ University, MÜHENDİSLİK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ, 1996 - 2004

## **Advising Theses**

YALÇIN U., Analysis of the scattering fields from pec curved surfaces with modified theory of physical optics,

Postgraduate, M.Sarnık(Student), 2015

YALÇIN U., Calculation of the scattered fields from a pec parabolic reflector by the extended boundary diffraction wave

theory, Postgraduate, C.Altıngöz(Student), 2014

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

- I. Uniform diffracted fields of the extended theory of BDW from the circular aperture on a perfectly magnetic conductive surface  
Altinel M., YALÇIN U.  
COMPEL - The International Journal for Computation and Mathematics in Electrical and Electronic Engineering, 2024 (SCI-Expanded)
- II. Developing a Real-Time Working Method That Improves Process Efficiency in High-Power Fiber Laser Systems  
YALÇIN U., Karanfil U.  
MICROMACHINES, vol.13, no.9, 2022 (SCI-Expanded)
- III. Scattering of waves by a planar junction between conductive and impedance half-planes  
YALÇIN U., UMUL Y. Z.  
OPTIK, vol.203, 2020 (SCI-Expanded)
- IV. Real-time monitoring of high-power fibre-laser cutting for different types of materials  
Karanfil U., YALÇIN U.  
UKRAINIAN JOURNAL OF PHYSICAL OPTICS, vol.20, no.2, pp.60-72, 2019 (SCI-Expanded)
- V. Evaluation of electromagnetic shielding effectiveness of fabrics produced from yarns containing metal wire with a mobile based measurement system  
ÇEVEN E. K., KARAKÜÇÜK A., DİRİK A. E., YALÇIN U.  
INDUSTRIA TEXTILA, vol.68, no.4, pp.289-295, 2017 (SCI-Expanded)
- VI. Uniform scattered fields from a perfectly conducting parabolic reflector with modified theory of physical optics  
Sarnik M., YALÇIN U.  
OPTIK, vol.135, pp.320-326, 2017 (SCI-Expanded)
- VII. CALCULATION OF THE DIFFRACTED WAVES FROM THE EDGE OF AN OPAQUE CUT CYLINDER BY THE BOUNDARY DIFFRACTION WAVE THEORY  
Altingoz C., YALÇIN U.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.28, no.1, pp.85-90, 2013 (SCI-Expanded)
- VIII. Uniform Diffracted Fields from a Perfectly Conducting Cylindrical Reflector with Modified Theory of Physical Optics  
YALÇIN U., Sarnik M.  
SCIENTIFIC WORLD JOURNAL, 2013 (SCI-Expanded)
- IX. Analysis of diffracted fields with the extended theory of the boundary diffraction wave for impedance surfaces  
Yalcin U.  
APPLIED OPTICS, vol.50, no.3, pp.296-302, 2011 (SCI-Expanded)
- X. Scattered fields of conducting half-plane between two dielectric media  
UMUL Y. Z., YALÇIN U.  
APPLIED OPTICS, vol.49, no.20, pp.4010-4017, 2010 (SCI-Expanded)
- XI. The effect of impedance boundary conditions on the potential function of the boundary diffraction wave theory  
Umul Y. Z., Yalcin U.  
OPTICS COMMUNICATIONS, vol.281, no.1, pp.23-27, 2008 (SCI-Expanded)

- XII. Scattering from a cylindrical reflector: modified theory of physical optics solution  
Yalcin U.  
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, vol.24, no.2, pp.502-506, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. Frequency Selective Surface Design And Analysis In C-Band  
BARIŞ ALTAY Y., Yalçın U.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.28, no.2, pp.597-612, 2023 (Peer-Reviewed Journal)
- II. OPAK BİR YÜZYEY ÜZERİNDEKİ DAİRESEL AÇIKLIKTAN SAÇILAN ALANLARIN HESABI  
ALTINEL M., YALÇIN U.  
Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.26, no.2, pp.433-446, 2021 (Peer-Reviewed Journal)
- III. Diffraction from Various Surfaces with Modified Theory of Physical Optics  
Sarnik M., Yalçın U.  
Sensors Transducers, vol.233, no.5, pp.58-63, 2019 (Peer-Reviewed Journal)
- IV. SINIR KIRINIM DALGASI TEORİSİ İLE YARIM DÜZLEMDEN BESSEL IŞINLARININ KIRINIMI  
Yalçın U.  
Uludağ University Journal of The Faculty of Engineering, vol.24, no.1, pp.331-342, 2019 (Peer-Reviewed Journal)
- V. Uniform Scattered Fields from a Parabolic Surface with the Boundary Diffraction Wave Theory  
YALÇIN U., Altingoz C.  
PHOTONICS LETTERS OF POLAND, vol.9, no.4, pp.125-127, 2017 (ESCI)
- VI. 4 Nesil LTE Mobil Telefon Sistemi Anten Tasarımı  
SAMET A., YALÇIN U.  
Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.16, no.1, pp.11-18, 2011 (Peer-Reviewed Journal)
- VII. Yutucu Yarım Düzlemin Kenarından Kirınan Üniform Alanların Fiziksel Optik Yöntemiyle Hesabı  
MÜCAHİT S., YALÇIN U.  
Çankaya University Journal of Science and Engineering, vol.7, no.2, pp.95-104, 2010 (Peer-Reviewed Journal)
- VIII. Diffraction theory of waves by resistive surfaces  
UMUL Y. Z., YALÇIN U.  
Progress in Electromagnetics Research B, vol.23, pp.1-13, 2010 (Scopus)
- IX. 4G Yeni Nesil LTE GSM Baz İstasyonu Anten Tasarımı  
ACAR M., YALÇIN U.  
Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.15, no.2, pp.23-29, 2010 (Peer-Reviewed Journal)
- X. Gauss Işınlarının Saçılmasının Sınır Kirinim Dalgası Teorisi İle İncelenmesi  
YALÇIN U.  
Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.15, no.2, pp.1-7, 2010 (Peer-Reviewed Journal)
- XI. Uniform scattered fields of the extended theory of boundary diffraction wave for PEC surfaces  
YALÇIN U.  
Progress in Electromagnetics Research M, vol.7, pp.29-39, 2009 (Scopus)
- XII. Scattering from perfectly magnetic conducting surfaces the extended theory of boundary diffraction wave approach  
YALÇIN U.  
Progress in Electromagnetics Research M, vol.7, pp.123-133, 2009 (Scopus)
- XIII. Odak Dışı Beslemeli Silindirik Parabolik Reflektör Antenlere Ait Işıma İntegralinin Optimizasyonu  
YALÇIN U., UMUL Y. Z.  
Uludağ Üniversitesi Mühendislik-Mimarlık Fakültesi Dergisi, vol.10, no.2, pp.1-7, 2005 (Peer-Reviewed Journal)
- XIV. Dielektrik Kaplanmış Silindirik Bir Yüzeyden Saçılan Elektromagnetik Dalgaların Fiziksel Optik Yaklaşımıyla Asimptotik Hesabı  
YALÇIN U.

- Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.10, no.2, pp.185-193, 2004 (Peer-Reviewed Journal)
- XV. **Asymptotic evaluation of the edge diffraction in cylindric paraboloidal reflector antennas**  
UMUL Y. Z., YALÇIN U.  
Mathematical & Computational Applications, vol.8, no.2, pp.143-150, 2003 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **C-BANDINDA FREKANS SEÇİCİ YÜZEY TASARIMI**  
BARIŞ Y., YALÇIN U.  
İstanbul Yeni Yüzyıl Üniversitesi 8. Bilim Günleri Kongresi, İstanbul, Turkey, 09 May 2022
- II. **Modified Theory of Physical Optics and Related Applications**  
Sarnik M., YALÇIN U.  
2nd International Conference on Optics, Photonics and Lasers (OPAL), Amsterdam, Netherlands, 24 - 26 April 2019, pp.64-68
- III. **Uniform Diffracted Fields from Non-Conducting Cylindrical Surface by Modified Theory of Physical Optics**  
Sarnik M., YALÇIN U.  
25th Telecommunication Forum (TELFOR), Belgrade, Serbia And Montenegro, 21 - 22 November 2017, pp.463-465
- IV. **A New Evaluation Method for Electromagnetic Shielding Effectiveness in Textiles**  
Çeven E. K., Karaküçük A., Dirik A. E., Yalçın U.  
UTİB Tekstil ve Konfeksiyon Sektöründe VIII. Uluslararası AR-GE Proje Pazarı, Bursa, Turkey, 12 - 13 May 2016, pp.171-172
- V. **Modified Theory of Physical Optics and Solution for Scattering Fields from a Perfectly Conducting Parabolic Reflector**  
Sarnik M., YALÇIN U.  
IEEE International Conference on Mathematical Methods in Electromagnetic Theory (MMET), Lviv, Ukraine, 5 - 07 July 2016, pp.349-352
- VI. **Characteristic of Laser Cutting Observation Technology and Applications**  
Karanfil U., YALÇIN U.  
National Conference on Electrical, Electronics and Biomedical Engineering (ELECO), Bursa, Turkey, 1 - 03 December 2016, pp.257-261

## Expert Reports

- I. **Scattering of Plane Waves by a Half Plane in the Interface of Two Isorefractive Medium**  
YALÇIN U.  
Bursa, 2015

## Metrics

Publication: 34  
Citation (WoS): 54  
Citation (Scopus): 52  
H-Index (WoS): 4  
H-Index (Scopus): 4