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Kişisel Bilgiler

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Publons / Web Of Science ResearcherID: K-5405-2015

ScopusID: 25630184100

Yoksis Araştırmacı ID: 55077

Eğitim Bilgileri

Doktora, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), Türkiye 2006 - 2012

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik Ve Elektronik Mühendisliği (YI) (Tezli), Türkiye 2002 - 2005

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Türkiye 1997 - 2002

Lisans, Orta Doğu Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Türkiye 1997 - 2002

Yaptığı Tezler

Doktora, Waveguiding of electromagnetic waves and investigation of negative phase velocity in photonic crystals and metamaterials, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği (Dr), 2012

Yüksek Lisans, An improved data acquisition system for contactless conductivity imaging, Orta Doğu Teknik Üniversitesi, Genel Biyoloji Anabilim Dalı, Elektrik Ve Elektronik Mühendisliği (YI) (Tezli), 2005

Araştırma Alanları

Mühendislik ve Teknoloji

Akademik Unvanlar / Görevler

Yrd.Doç.Dr., Ankara Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2013 - Devam Ediyor
Araştırma Görevlisi, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2006 - 2012

Araştırma Görevlisi, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2002 - 2006

Akademik İdari Deneyim

Ankara Üniversitesi, 2015 - 2019

Verdiği Dersler

MICROWAVES I, Lisans, 2023 - 2024, 2022 - 2023, 2021 - 2022

MICROWAVES II, Lisans, 2022 - 2023, 2021 - 2022

ELE315 ELECTROMAGNETİCS II, Lisans, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

ELM311 ELEKTROMANYETİK II, Lisans, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

ELM471 MÜHENDİSLİKTE PROJELENDİRME I, Lisans, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

EEE216 ELECTROMAGNETİCS II, Lisans, 2017 - 2018

300200714051 RF YÜKSELTEÇLER, Yüksek Lisans, 2017 - 2018, 2016 - 2017

ELE216 ELECTROMAGNETİCS I, Lisans, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

ELM472 MÜHENDİSLİKTE PROJELENDİRME II, Lisans, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

ELM206 ELEKTROMANYETİK I, Lisans, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

EEE215 ELECTROMAGNETICS I, Lisans, 2017 - 2018

ELE203 CIRCUIT ANALYSIS I, Lisans, 2014 - 2015, 2013 - 2014

ELE204 CIRCUIT ANALYSIS II, Lisans, 2014 - 2015, 2013 - 2014

ELE216 Electromagnetics I, Lisans, 2013 - 2014

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Using Thin Films of Phase-Change Material for Active Tuning of Terahertz Waves Scattering on Dielectric Cylinders**
Cakmak A. O., ÇOLAK İ., Serebryannikov A. E.
Materials, cilt.17, sa.1, 2024 (SCI-Expanded)
- II. **An effective lithography training module adapting semianalytical calculation approaches**
Cakmak A. O., ÇOLAK İ., Awadelkarim O. O.
JOURNAL OF THE SOCIETY FOR INFORMATION DISPLAY, cilt.29, sa.11, ss.868-895, 2021 (SCI-Expanded)
- III. **Long term stability of 1.3 GHz high power RF amplifier**
Karsli O., ÇOLAK İ.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, cilt.29, sa.2, ss.673-686, 2021 (SCI-Expanded)
- IV. **Two types of single-beam deflection and asymmetric transmission in photonic structures without interface corrugations**
Serebryannikov A. E., Colak E., Magath T., Özbay E.
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA A-OPTICS IMAGE SCIENCE AND VISION, cilt.33, sa.12, ss.2450-2458, 2016 (SCI-Expanded)
- V. **Multiple slow waves and relevant transverse transmission and confinement in chirped photonic crystals**
Serebryannikov A. E., Cakmak A. O., ÇOLAK İ., Caglayan H., KURT H., ÖZBAY E.
OPTICS EXPRESS, cilt.22, sa.18, ss.21806-21819, 2014 (SCI-Expanded)
- VI. **Theoretical and experimental investigations of asymmetric light transport in graded index photonic crystal waveguides**
Giden I. H., Yilmaz D., Turdnev M., Kurt H., ÇOLAK İ., Ozbay E.
APPLIED PHYSICS LETTERS, cilt.104, sa.3, 2014 (SCI-Expanded)
- VII. **Experimental study of broadband unidirectional splitting in photonic crystal gratings with broken structural symmetry**
ÇOLAK İ., Serebryannikov A. E., Cakmak A. O., ÖZBAY E.

- APPLIED PHYSICS LETTERS, cilt.102, sa.15, 2013 (SCI-Expanded)
- VIII. **Dispersion irrelevant wideband asymmetric transmission in dielectric photonic crystal gratings**
Serebryannikov A. E., ÇOLAK İ., Cakmak A. O., ÖZBAY E.
OPTICS LETTERS, cilt.37, sa.23, ss.4844-4846, 2012 (SCI-Expanded)
- IX. **Simultaneously opening transmission channels with negative and positive phase velocities for the stacked subwavelength apertures in fishnet metamaterials with hybrid unit lattices**
Cakmak A. O., ÇOLAK İ., ÖZBAY E.
JOURNAL OF NANOPHOTONICS, cilt.6, 2012 (SCI-Expanded)
- X. **Characterization, slab-pair modeling and phase analysis of circular fishnet metamaterials**
Ozturk Y., YILMAZ A. E., ÇOLAK İ., ÖZBAY E.
PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS, cilt.10, sa.4, ss.624-631, 2012 (SCI-Expanded)
- XI. **Complementary chiral metamaterials with giant optical activity and negative refractive index**
Li Z., Alici K. B., ÇOLAK İ., ÖZBAY E.
APPLIED PHYSICS LETTERS, cilt.98, sa.16, 2011 (SCI-Expanded)
- XII. **Spatial filtering using dielectric photonic crystals at beam-type excitation**
ÇOLAK İ., Cakmak A. O., Serebryannikov A. E., ÖZBAY E.
JOURNAL OF APPLIED PHYSICS, cilt.108, sa.11, 2010 (SCI-Expanded)
- XIII. **Unidirectional transmission in photonic-crystal gratings at beam-type illumination**
Cakmak A. O., ÇOLAK İ., Serebryannikov A. E., ÖZBAY E.
OPTICS EXPRESS, cilt.18, sa.21, ss.22283-22298, 2010 (SCI-Expanded)
- XIV. **Chiral metamaterials with negative refractive index based on four "U" split ring resonators**
Li Z., Zhao R., Koschny T., Kafesaki M., Alici K. B., ÇOLAK İ., Caglayan H., ÖZBAY E., Soukoulis C. M.
APPLIED PHYSICS LETTERS, cilt.97, sa.8, 2010 (SCI-Expanded)
- XV. **Coupling effect between two adjacent chiral structure layers**
Li Z., Caglayan H., ÇOLAK İ., Zhou J., Soukoulis C. M., ÖZBAY E.
OPTICS EXPRESS, cilt.18, sa.6, ss.5375-5383, 2010 (SCI-Expanded)
- XVI. **Transmission enhancement through deep subwavelength apertures using connected split ring resonators**
Ates D., Cakmak A. O., ÇOLAK İ., Zhao R., Soukoulis C. M., ÖZBAY E.
OPTICS EXPRESS, cilt.18, sa.4, ss.3952-3966, 2010 (SCI-Expanded)
- XVII. **Enhanced transmission through a subwavelength aperture using metamaterials**
Cakmak A. O., AYDIN K., ÇOLAK İ., Li Z., Bilotti F., Vegni L., ÖZBAY E.
APPLIED PHYSICS LETTERS, cilt.95, sa.5, 2009 (SCI-Expanded)
- XVIII. **Frequency dependent steering with backward leaky waves via photonic crystal interface layer**
ÇOLAK İ., Caglayan H., Cakmak A. O., Della Villa A., Capolino F., ÖZBAY E.
OPTICS EXPRESS, cilt.17, sa.12, ss.9879-9890, 2009 (SCI-Expanded)
- XIX. **High efficiency of graded index photonic crystal as an input coupler**
Cakmak A. O., ÇOLAK İ., Caglayan H., KURT H., ÖZBAY E.
JOURNAL OF APPLIED PHYSICS, cilt.105, sa.10, 2009 (SCI-Expanded)
- XX. **The focusing effect of graded index photonic crystals**
Kurt H., ÇOLAK İ., Cakmak O., Caglayan H., Ozbay E.
APPLIED PHYSICS LETTERS, cilt.93, sa.17, 2008 (SCI-Expanded)
- XXI. **Enhanced transmission and directivity from metallic subwavelength apertures with nonuniform and nonperiodic grooves**
Li Z., Caglayan H., ÇOLAK İ., Ozbay E.
APPLIED PHYSICS LETTERS, cilt.92, sa.1, 2008 (SCI-Expanded)

- I. **OPERATION TESTS of the 260 MHz 1500 W SOLID STATE RF AMPLIFIER at TARLA FACILITY**
Karşlı Ö., ÇOLAK İ.
Communications Faculty of Sciences University of Ankara Series A2-A3 Physical Sciences and Engineering, cilt.61, sa.2, ss.181-196, 2019 (Hakemli Dergi)
- II. **FOCUSING, IMAGING AND FOURIER TRANSFORMING WITH A LARGE NUMERICAL APERTURE, DIELECTRIC FLAT PHOTONIC CRYSTAL LENS IN METAMATERIAL REGIME**
ÇOLAK İ., ÇAKMAK A. Ö.
Communications Faculty of Sciences University of Ankara Series A2-A3 Physical Sciences and Engineering, cilt.61, sa.1, ss.76-101, 2019 (Hakemli Dergi)
- III. **Prostat Kanseri Olgularında Ga-68 PSMA PET Görüntülemenin Multiparametrik MR Görüntülemeye Katkısı**
BAKIR B., ONAY A., ÇOLAK İ., USLU BEŞLİ R. L.
Türkiye Klinikleri Nükleer Tıp, 2019 (Hakemsiz Dergi)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Pulsed Power Applications @TARLA**
Çolak İ., Dokuyucu C., Karşlı Ö.
48th International Nathiagali Summer College on Physics and Contemporary Needs, Islamabad, Pakistan, 17 - 19 Temmuz 2023
- II. **Beam Shaping and Reduced Waist in a Photonic Crystal Slab**
ÇOLAK İ.
The Photonics Workshop 2020, 8 - 12 Mart 2020
- III. **TWO DIFFERENT BEAM DEFLECTION MECHANISMS TOGETHER WITH UNIDIRECTIONALITY IN PHOTONIC STRUCTURES WITHOUT CORRUGATIONS UNDER OBLIQUE INCIDENCE**
ÇOLAK İ., SEREBRYANNIKOV A. E., MAGATH T., ÖZBAY E.
XXIII Transfrontier Meeting of Sensors and Biosensors, Barcelona Spain, 20 - 21 Eylül 2018
- IV. **LOW-PASS, BAND-PASS AND BAND-STOP TYPE SPATIAL FILTERING IN A PHOTONIC CRYSTAL**
ÇOLAK İ., SEREBRYANNIKOV A. E., PETROV A., USIK P. V., ÖZBAY E.
XXIII Transfrontier Meeting of Sensors and Biosensors, Barcelona Spain, 20 - 21 Eylül 2018
- V. **UNIDIRECTIONAL AND BIDIRECTIONAL BEAM SPLITTING IN PHOTONIC STRUCTURES DUE TO DIFFRACTION WITH DEFECT LAYER REPLACING INTERFACE CORRUGATIONS**
ÇOLAK İ., SEREBRYANNIKOV A. E., USIK P. V., ÖZBAY E.
11th Ibero-American Congress on Sensors, Barcelona Spain, 17 - 20 Eylül 2018
- VI. **EXPLORING MODIFIED HERMITE-GAUSSIAN WAVES FOR PHASE-FRONT ENGINEERING IN A GRADED INDEX PHOTONIC CRYSTAL OPERATING OUT OF METAMATERIAL CLASS**
ÇOLAK İ., ÇAKMAK A. Ö., KURT H., ÖZBAY E.
11th Ibero-American Congress on Sensors, Barcelona Spain, 17 - 20 Eylül 2018
- VII. **The Use of Photonic Crystals to Control the Electromagnetic Wave Propagation**
ÇOLAK İ.
International Conference on Semiconductors, Optoelectronics and Nanostructures, 20 - 21 Ağustos 2018
- VIII. **Multi-frequency Low-Pass, Band-Pass and Band-Stop Type Spatial Filtering in a Photonic Crystal**
ÇOLAK İ., SEREBRYANNIKOV A. E., PETROV A., USIK P. V., ÖZBAY E.
International Conference on Nanotechnology and Nanoengineering, 16 - 18 Temmuz 2018
- IX. **Multiple Slow Waves in a Simple Photonic Structure E Colak A E Serebryannikov A O Cakmak and E Ozbay NANONG2015 International Conference on Nanoscience Nanotechnology for Next Generation 2015 October 29 31 2015 Antalya Turkey**
ÇOLAK İ., Serebryannikov A. E., Çakmak A. Ö., ÖZBAY E.
NANONG2015 (International Conference on Nanoscience&Nanotechnology for Next Generation 2015), October 29-31, 2015, Antalya, Turkey., 29 - 31 Ekim 2015

- X. **Diffraction inspired unidirectional splitting in dielectric rod structures with broken symmetry** Evrim Colak Andriy Serebryannikov Atilla Ozgur Cakmak and Ekmel Ozbay ELECTROTECH 15 III International Electrical Electronic Engineering and Technologies Conference October 2 3 2015 Istanbul Turkey
ÇOLAK İ., Serebryannikov A., Çakmak A. Ö., ÖZBAY E.
ELECTROTECH '15, III. International Electrical & Electronic Engineering and Technologies Conference, October 2-3, 2015, Istanbul, Turkey., 2 - 03 Ekim 2015
- XI. **Spatial Filters Based On EBG Structures With Anisotropic-Like Dispersion**
Serebryannikov A. E., Cakmak A. O., ÇOLAK İ., Ozbay E.
4th European Conference on Antennas and Propagation (EuCAP), Barcelona, İspanya, 12 - 16 Nisan 2010
- XII. **Photonic Crystal based Spatial Filtering**
ÇOLAK İ., Cakmak A. O., Serebryannikov A. E., Ozbay E.
22nd Annual Meeting of the IEEE-Photonics-Society, Belek Antalya, Türkiye, 4 - 08 Ekim 2009, ss.735-736

Metrikler

Yayın: 36

Atıf (WoS): 596

Atıf (Scopus): 26

H-İndeks (WoS): 11

H-İndeks (Scopus): 3