

# **Prof. BARIŞ AKAOĞLU**

## **Personal Information**

**Office Phone:** [+90 312 203 3464](tel:+903122033464)

**Email:** akaoglu@eng.ankara.edu.tr

**Other Email:** akaoglu@gmail.com

**Web:** <http://nanofotonik.ankara.edu.tr/>

## **International Researcher IDs**

ScholarID: xotgXv0AAAAJ

ORCID: 0000-0002-5573-3901

Publons / Web Of Science ResearcherID: A-4169-2008

Yoksis Researcher ID: 23869

## **Education Information**

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Fizik Anabilim Dalı, Turkey 1998 - 2004

Doctorate, University of North Carolina at Chapel Hill, Kimya, United States Of America 2002 - 2002

Postgraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1996 - 1998

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1992 - 1996

## **Dissertations**

Doctorate, Optical properties of silicon based amorphous thin films, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Fizik (Dr), 2004

Postgraduate, Determination of optical constants of silicon based amorphous films by UV- visible transmittance and reflectance measurement, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Fizik (YI) (Tezli), 1998

## **Research Areas**

Electromagnetic, Electromagnetic Band Spacing Structures, Electromagnetic Waves, Antennas and Propagation, Photonic Band Spacing Structures, Physics, Optics, Optical Properties, Spectroscopy of Matter

## **Academic Titles / Tasks**

Professor, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2015 - Continues

Associate Professor, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2011 - 2015

Assistant Professor, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2010 - 2011

Assistant Professor, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler (YI) (Tezli), 2007 - 2010

Lecturer, Gazi University, Fen Fakültesi, Fizik Bölümü, 2005 - 2007

Research Assistant, Middle East Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1996 - 2004

## **Academic and Administrative Experience**

Head of Department, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2023 - Continues  
Fakülte Yönetim Kurulu Üyesi, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2019 - 2022  
Assistant Director of the Institute, Ankara University, Fen Bilimleri Enstitüsü, 2019 - 2020

## **Courses**

Mühendislik Elektrodinamığıne Giriş, Postgraduate, 2022 - 2023, 2021 - 2022  
Research Project, Undergraduate, 2022 - 2023, 2021 - 2022  
Fizik Mühendisliğinde Araştırma Teknikleri I, Undergraduate, 2022 - 2023, 2021 - 2022  
Engineering Electrodynamics, Undergraduate, 2022 - 2023, 2021 - 2022  
Electromagnetic Theory I, Undergraduate, 2021 - 2022  
Fizikte Güncel Konular, Undergraduate, 2022 - 2023  
Eletromagnetic Theory II, Undergraduate, 2022 - 2023  
Fizik Mühendisliği Araştırma Teknikleri II, Undergraduate, 2021 - 2022  
Fizik Laboratuvarı, Undergraduate, 2021 - 2022  
Fizik Mühendisliğinde Araştırma Teknikleri, Undergraduate, 2021 - 2022  
Nanofotonik, Postgraduate, 2022 - 2023, 2021 - 2022  
Optics Laboratory, Undergraduate, 2022 - 2023  
ELEKTROMAGNETİZMA, Undergraduate, 2014 - 2015, 2013 - 2014  
PHYSICS 2, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
ELEKTROMAGNETİK DALGALAR VE UYGULAMALARI II, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013  
NANOFOTONİK 1, Postgraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013  
PHYSICS 1, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
Fizik Laboratuvarı II, Undergraduate, 2013 - 2014  
FİZİK MÜHENDİSLİĞİNDE ARAŞTIRMA TEKNİKLERİ I, Undergraduate, 2013 - 2014  
FİZİK MÜHENDİSLİĞİNDE ARAŞTIRMA TEKNİKLERİ II, Undergraduate, 2013 - 2014, 2012 - 2013  
FİZİK MÜHENDİSLİĞİNDE ARAŞTIRMA TEKNİKLERİ 1, Undergraduate, 2012 - 2013  
Kuantum Fiziği Laboratuvarı, Undergraduate, 2011 - 2012  
OPTİK FİBER KOMÜNİKASYONU, Postgraduate, 2010 - 2011

## **Advising Theses**

Akaoğlu B., Mikrodalga frekanslarda metamalzeme tabanlı sensör uygulamaları, Postgraduate, G.UZUN(Student), 2022  
AKAOĞLU B., Metamalzeme temelli mikroşerit sistemlerde elektromanyetik induklılık, Postgraduate, Y.GÜNEŞ(Student), 2021  
AKAOĞLU B., Elektromanyetik metamalzeme tabanlı yapıların mikrodalga frekanslarda sensör uygulamaları, Doctorate, M.SUPHi(Student), 2021  
AKAOĞLU B., Mikroşerit Filtre Tasarımı ve Analizi, Postgraduate, E.ARSLAN(Student), 2020  
AKAOĞLU B., Mikroşerit alçak geçiren filtre tasarımı ve analizi / Microstrip filter design, Postgraduate, E.Arslan(Student), 2020  
AKAOĞLU B., Design and numerical computing analysis of multilayer thin film coatings with high transparent in visible spectrum and RF shielding ability, Postgraduate, O.ALPAY(Student), 2019  
AKAOĞLU B., Optiksəl saydam antenlerin tasarımını ve karakterizasyonu, Postgraduate, Y.DEMİRhan(Student), 2019  
AKAOĞLU B., Energy harvesting with metamaterial, Postgraduate, E.UZAY(Student), 2019  
AKAOĞLU B., Omnidirectional metamaterial absorber, Postgraduate, K.GÖKHAN(Student), 2019  
AKAOĞLU B., Mikro-şerit yama antenlerin minyatürleştirilmesi ve bant genişliğinin artırılması, Postgraduate, B.ONAYLI(Student), 2018

AKAOĞLU B., Miniaturization and enhancement of the bandwidth of micro-strip patch antennas, Postgraduate, B.Onaylı(Student), 2018

AKAOĞLU B., Elektromanyetik dalgaların yüzey düzeni değiştirilmiş fotonik kristallerdeki davranışları, Postgraduate, ÖÇAPRAZ(Student), 2017

AKAOĞLU B., Yapay periyodik yapılarda ışığın davranışının sayısal ve deneysel çözümlenmesi, Postgraduate, T.DEMİRSOY(Student), 2016

AKAOĞLU B., Hipbolik metamalzemeler, Postgraduate, B.ÇETİN(Student), 2016

AKAOĞLU B., LiNbO<sub>3</sub> tabanlı şiddet kipleyicisi tasarımı, üretimi ve karakterizasyonu, Postgraduate, S.DÖNERTAŞ(Student), 2014

AKAOĞLU B., Fotonik kristal algılayıcıların tasarılanması ve sayısal çözümlenmesi, Postgraduate, S.TEZCAN(Student), 2014

AKAOĞLU B., Çizgi kusurlu fotonik kristal dalga kılavuzlarına ışığın bağdaştırılması, Postgraduate, O.ÖZDEMİR(Student), 2014

AKAOĞLU B., Fotonik kristal dalga kılavuzu temelli küçük optik filtrelerin tasarılanması ve sayısal çözümlenmesi, Postgraduate, Y.DİLDAR(Student), 2013

AKAOĞLU B., Lityum niyobat tabanlı periyodik dielektrik yapılarının üretimi ve optik çözümlenmesi, Postgraduate, G.KURT(Student), 2013

AKAOĞLU B., Fotonik kristal dalga kılavuzları ve yavaş ışık elde edilmesi, Doctorate, F.BAĞCI(Student), 2013

AKAOĞLU B., Aydınlatma amaçlı LED matrisi üretimi ve ıslı özelliklerinin çözümlenmesi, Postgraduate, S.KALE(Student), 2010

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, October, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Ankara Üniversitesi, March, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, February, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Orta Doğu Teknik Üniversitesi, February, 2022

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

- I. **Transparent dielectric/metal/dielectric multilayer microstrip patch antennas for X and Ku-band**  
KAYA Ç., AKAOĞLU B., ER U., Bayram Y.  
Optics Communications, vol.564, 2024 (SCI-Expanded)
- II. **A metamaterial-based dielectric sensor for characterization of ethanol/1-pentanol binary liquid mixtures at dual bands**  
Alp K., Bağcı F., Akaoğlu B.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.129, no.8, 2023 (SCI-Expanded)
- III. **Minkowski-like fractal resonator-based dielectric sensor for estimating the complex permittivity of binary mixtures of ethanol, methanol and water**  
Gulso M. S., BAĞCI F., CAN S., YILMAZ A. E., AKAOĞLU B.  
SENSORS AND ACTUATORS A-PHYSICAL, vol.330, 2021 (SCI-Expanded)
- IV. **Metamaterial-based sensor with a polycarbonate substrate for sensing the permittivity of alcoholic liquids in a WR-229 waveguide**  
Gulso M. S., BAĞCI F., CAN S., YILMAZ A. E., AKAOĞLU B.  
SENSORS AND ACTUATORS A-PHYSICAL, vol.312, 2020 (SCI-Expanded)

- V. **Single and multi-band electromagnetically induced transparency-like effects with a four-fold symmetric metamaterial design**  
 BAĞCI F., AKAOĞLU B.  
 MATERIALS RESEARCH EXPRESS, vol.6, no.5, 2019 (SCI-Expanded)
- VI. **Metamaterial-Based Four-Band Electromagnetic Energy Harvesting at Commonly Used GSM and Wi-Fi Frequencies**  
 Karakaya E., BAĞCI F., Yilmaz A. E., AKAOĞLU B.  
 JOURNAL OF ELECTRONIC MATERIALS, vol.48, no.4, pp.2307-2316, 2019 (SCI-Expanded)
- VII. **Four-band electromagnetic energy harvesting with a dual-layer metamaterial structure**  
 Karakaya E., BAĞCI F., CAN S., YILMAZ A. E., AKAOĞLU B.  
 INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING, vol.29, no.1, 2019 (SCI-Expanded)
- VIII. **A polarization independent electromagnetically induced transparency-like metamaterial with large group delay and delay-bandwidth product**  
 BAĞCI F., AKAOĞLU B.  
 JOURNAL OF APPLIED PHYSICS, vol.123, no.17, 2018 (SCI-Expanded)
- IX. **Single and multi-band electromagnetic induced transparency-like metamaterials with coupled split ring resonators**  
 BAĞCI F., AKAOĞLU B.  
 JOURNAL OF APPLIED PHYSICS, vol.122, no.7, 2017 (SCI-Expanded)
- X. **Dual-Band Double-Cylindrical-Ring 3D Frequency Selective Surface**  
 CAN S., Karakaya E., BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
 ETRI JOURNAL, vol.39, no.1, pp.69-75, 2017 (SCI-Expanded)
- XI. **A glass based dual band frequency selective surface for protecting systems against WLAN signals**  
 BAĞCI F., Mulazimoglu C., CAN S., Karakaya E., YILMAZ A. E., AKAOĞLU B.  
 AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.82, pp.426-434, 2017 (SCI-Expanded)
- XII. **Tunable Metasurfaces for Filtering the Electromagnetic Waves Under Different Excitations**  
 CAN S., Karakaya E., BAĞCI F., Yilmaz A. E., AKAOĞLU B.  
 APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, vol.31, no.9, pp.1056-1064, 2016 (SCI-Expanded)
- XIII. **Consequences of Unit Cell Design in Metamaterial Perfect Absorbers**  
 BAĞCI F., AKAOĞLU B.  
 ACTA PHYSICA POLONICA A, vol.129, no.4, pp.792-796, 2016 (SCI-Expanded)
- XIV. **Enhancement of buffer capability in slow light photonic crystal waveguides with extended lattice constants**  
 BAĞCI F., AKAOĞLU B.  
 OPTICAL AND QUANTUM ELECTRONICS, vol.47, no.3, pp.791-806, 2015 (SCI-Expanded)
- XV. **Polarization Beam Splitter Based on Self-Collimation of a Hybrid Photonic Crystal**  
 BAĞCI F., CAN S., AKAOĞLU B., Yilmaz A. E.  
 RADIOENGINEERING, vol.23, no.4, pp.1033-1037, 2014 (SCI-Expanded)
- XVI. **Tailoring slow light properties by shifting the innermost rows of holes in photonic crystal waveguides with ring-shaped holes**  
 BAĞCI F., AKAOĞLU B.  
 OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.8, no.5-6, pp.353-358, 2014 (SCI-Expanded)
- XVII. **Enhanced Electro-Optic Modulation Performance in Optical Buffers by Slowing Light in Optimized Photonic Crystal Slab Structures**  
 BAĞCI F., AKAOĞLU B.  
 ACTA PHYSICA POLONICA A, vol.125, no.2, pp.611-614, 2014 (SCI-Expanded)
- XVIII. **A systematic analysis of hole size, hole-type and rows shifting on slow light characteristics of**

- photonic crystal waveguides with ring-shaped holes**  
 BAĞCI F., AKAOĞLU B.  
 OPTIK, vol.125, no.11, pp.2702-2707, 2014 (SCI-Expanded)
- XIX. Enhancement of Refractive Index Sensitivity in Photonic Crystal Waveguide-Based Sensors by Selective Infiltration**  
 BAĞCI F., AKAOĞLU B.  
 ACTA PHYSICA POLONICA A, vol.124, no.1, pp.50-55, 2013 (SCI-Expanded)
- XX. Influences of supercell termination and lateral row number on the determination of slow light properties of photonic crystal waveguides**  
 BAĞCI F., AKAOĞLU B.  
 OPTIK, vol.124, no.21, pp.4739-4743, 2013 (SCI-Expanded)
- XXI. Effects of structurally deformed sub-lattice points on the dispersion properties of 2D hybrid triangular-graphite photonic crystal**  
 BAĞCI F., AKAOĞLU B.  
 OPTICS COMMUNICATIONS, vol.285, no.6, pp.1486-1493, 2012 (SCI-Expanded)
- XXII. Effects of tail states on the conduction mechanisms in silicon carbide thin films with high carbon content**  
 SEL K., AKAOĞLU B., Atilgan I., Katircioglu B.  
 SOLID-STATE ELECTRONICS, vol.57, no.1, pp.1-8, 2011 (SCI-Expanded)
- XXIII. Electroluminescence properties of a PIN structure made by nearly stoichiometric a-SiCx:H active layer**  
 SEL K., AKAOĞLU B., ÖZDEMİR O., Atilgan I.  
 VACUUM, vol.83, no.5, pp.813-818, 2009 (SCI-Expanded)
- XXIV. Carbon content influence on the optical constants of hydrogenated amorphous silicon carbon alloys**  
 AKAOĞLU B., SEL K., Atilgan I., Katircioglu B.  
 OPTICAL MATERIALS, vol.30, no.8, pp.1257-1267, 2008 (SCI-Expanded)
- XXV. Effect of bleaching on color change and refractive index of dental composite resins**  
 HUBBEZOĞLU İ., AKAOĞLU B., DOĞAN A., Keskin S., BOLAYIR G., ÖZÇELİK S., DOĞAN M.  
 DENTAL MATERIALS JOURNAL, vol.27, no.1, pp.105-116, 2008 (SCI-Expanded)
- XXVI. Construction of a novel multilayer system and its use for oriented immobilization of immunoglobulin G**  
 Demirel G., Caykara T., AKAOĞLU B., ÇAKMAK M.  
 SURFACE SCIENCE, vol.601, no.19, pp.4563-4570, 2007 (SCI-Expanded)
- XXVII. Structural and optical properties of an In<sub>x</sub>Ga<sub>1-x</sub>N/GaN nanostructure**  
 Korcak S., Oeztuerk M. K., Coerekci S., AKAOĞLU B., Yu H., Cakmak M., Saglam S., Oezcelik S., Oezbay E.  
 SURFACE SCIENCE, vol.601, no.18, pp.3892-3897, 2007 (SCI-Expanded)
- XXVIII. Structural, morphological, and optical properties of AlGaN/GaN heterostructures with AlN buffer and interlayer**  
 Corekci S., Ozturk M. K., AKAOĞLU B., ÇAKMAK M., ÖZÇELİK S., Ozbay E.  
 JOURNAL OF APPLIED PHYSICS, vol.101, no.12, 2007 (SCI-Expanded)
- XXIX. Adsorption of surfactant by hydrophobically modified poly[2-(diethylamino)ethylmethacrylate-co-N-vinyl-2-pyrrolidone/octadecyl acrylate)] hydrogels and effect of surfactant adsorption on the volume phase transition**  
 Caykara T., Izol D., Birlik G., AKAOĞLU B.  
 JOURNAL OF APPLIED POLYMER SCIENCE, vol.103, no.6, pp.3771-3775, 2007 (SCI-Expanded)
- XXX. Influences of carbon content and power density on the PECVD grown a-Si<sub>1-x</sub>:C<sub>x</sub>:H thin films**  
 AKAOĞLU B., Gulses A., Atilgan I., Katircioglu B.  
 VACUUM, vol.81, no.1, pp.120-125, 2006 (SCI-Expanded)
- XXXI. Transport studies of carbon-rich a-SiCx : H film through admittance and deep-level transient spectroscopy measurements**  
 Atilgan I., Ozdemir O., AKAOĞLU B., SEL K., Katircioglu B.

- PHILOSOPHICAL MAGAZINE, vol.86, no.19, pp.2771-2796, 2006 (SCI-Expanded)
- XXXII. Frequency dependence of conductivity in intrinsic amorphous silicon carbide film, assessed through admittance measurement of metal insulator semiconductor structure  
Ozdemir O., Atilgan I., AKAOĞLU B., SEL K., Katircioglu B.  
THIN SOLID FILMS, vol.497, no.1-2, pp.149-156, 2006 (SCI-Expanded)
- XXXIII. Thickness and optical constant distributions of PECVD a-SiCx : H thin films along electrode radial direction  
AKAOĞLU B., Atilgan I., Katircioglu B.  
THIN SOLID FILMS, vol.437, no.1-2, pp.257-265, 2003 (SCI-Expanded)
- XXXIV. Correlation between optical path modulations and transmittance spectra of a-Si : H thin films  
AKAOĞLU B., Atilgan I., Katircioglu B.  
APPLIED OPTICS, vol.39, no.10, pp.1611-1616, 2000 (SCI-Expanded)

### **Articles Published in Other Journals**

- I. Bağlı Nem Oranını Algılamaya Yönelik Soğurucu Tabanlı Metamalzeme Sensör  
Gülsu M. S., BAĞCI F., AKAOĞLU B.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.8, no.3, pp.561-571, 2020 (Peer-Reviewed Journal)
- II. Design of a Polarization-Independent Dual-Band Electromagnetically Induced Transparency-Like Metamaterial  
Demirkap O., BAĞCI F., Yilmaz A. E., AKAOĞLU B.  
ADVANCED ELECTROMAGNETICS, vol.8, no.2, pp.63-70, 2019 (ESCI)
- III. Fotonik Kristallerde Yüzey Kipleri Özelliklerini Kullanarak Bağlaştırıcı, Demet Bölücü Ve Algılayıcı Tasarımları  
BAĞCI F., Çapraz Ö., AKAOĞLU B.  
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.21, no.6, pp.1245-1253, 2017 (Peer-Reviewed Journal)
- IV. Enhanced electro-optic modulation of LiNbO<sub>3</sub>-based photonic crystal cavities with dual mode and polarization operation  
BAĞCI F., Kurt G., AKAOĞLU B., ÖZBAY E.  
TURKISH JOURNAL OF PHYSICS, vol.41, no.4, pp.303-313, 2017 (ESCI)
- V. ENHANCEMENT OF SENSITIVITY OF PHOTONIC CRYSTAL BASED TEMPERATURE SENSOR  
BAĞCI F., Tezcan S., AKAOĞLU B.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BİLİMLERİ DERGİSİ, vol.21, no.2, pp.66-71, 2015 (ESCI)
- VI. A1×4 power-splitter based on photonic crystal Y-splitter and directional couplers  
BAĞCI F., AKAOĞLU B.  
Optica Pura y Aplicada, vol.46, no.3, pp.265-273, 2013 (ESCI)

### **Refereed Congress / Symposium Publications in Proceedings**

- I. Mikroşerit Dizi Antenlerde Demet Yöneliminin Kontrolü  
Yılmaz S., Bağcı F., Akaoğlu B.  
Yoğun Madde Fiziği – Ankara Toplantısı, Ankara, Turkey, 22 December 2023, pp.26
- II. Design of a Microstrip Dielectric Sensor That Can Detect Ethanol-Water and Ethanol-Methanol Mixtures  
Bağcı F., Gülsu M. S., Can S., Yılmaz A. E., Akaoğlu B.  
26. Yoğun Madde Fiziği – Ankara Toplantısı, Ankara, Turkey, 24 December 2021, pp.40
- III. Metamalzeme soğurucu ile kimyasal sıvı algılama

- Gülsu M. S., BAĞCI F., AKAOĞLU B.  
25. Yoğun Madde Fiziği Toplantısı, Ankara, Turkey, 20 December 2019, pp.29
- IV. **Controlling transmission and delay of electromagnetic waves by metamaterials in TEM waveguide**  
BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
The International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC-2019), Nevşehir, Turkey, 21 - 23 June 2019, pp.197-201
- V. **Mikroşerit Yama Antenlerin Metalik Izgaralar ile Saydamlaştırılması**  
Demirhan Y., BAĞCI F., AKAOĞLU B.  
Yoğun Madde Fiziği – Ankara Toplantısı, Ankara, Turkey, 21 December 2018, pp.49
- VI. **GSM ve Wi-Fi Bandlarına Yönelik Metamalzeme Tabanlı Enerji Hasatlayıcı**  
Karakaya E., BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
IX.URSI-TÜRKİYE 2018 BİLİMSEL KONGRESİ ULUSAL GENEL KURUL TOPLANTISI, Ankara, Turkey, 6 - 08 September 2018, pp.288-290
- VII. **Metamalzeme ile 1,8 GHz ve 2,6 GHz Frekanslarında Elektromanyetik Hasatlama**  
Karakaya E., BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
IX.URSI-TÜRKİYE 2018 BİLİMSEL KONGRESİ ULUSAL GENEL KURUL TOPLANTISI, Konya, Turkey, 6 - 08 September 2018, pp.163-165
- VIII. **WR-187 Dalga Kılavuzunda Ayrık Halka Rezonatör ve Kesik Tel Rezonatörler ile Elektromanyetik İndüklenmiş Saydamlık**  
BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
IX.URSI-TÜRKİYE 2018 BİLİMSEL KONGRESİ ULUSAL GENEL KURUL TOPLANTISI, Konya, Turkey, 6 - 08 September 2018, pp.266-268
- IX. **Kutupluluktan Bağımsız Çift Bantlı Elektromanyetik İndüklenmiş Saydamlık-Benzeri Metamalzeme Tasarımı**  
Demirkap Ö., BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
IX.URSI-TÜRKİYE 2018 BİLİMSEL KONGRESİ ULUSAL GENEL KURUL TOPLANTISI, Konya, Turkey, 6 - 08 September 2018, pp.54-57
- X. **Bandwidth-enhanced polarization independent metamaterial absorber with Zgap resonators**  
BAĞCI F., AKAOĞLU B.  
International Congress on The World of Technology and Advanced Materials (Witam-2018), Kırşehir, Turkey, 21 - 23 September 2018, pp.190-194
- XI. **Tunable electromagnetic induced transparency with microstrip coupled split-ring resonator**  
BAĞCI F., AKAOĞLU B.  
International Congress on The World of Technology and Advanced Materials (Witam-2018), Kırşehir, Turkey, 21 - 23 September 2018, pp.194-198
- XII. **FR-4 Altaş ile 5,8 GHz Frekans Bandına Yönelik Metamalzeme Hasatlayıcı**  
BAĞCI F., Karakaya E., AKAOĞLU B.  
Yoğun Madde Fiziği – İzmir Toplantısı, İzmir, Turkey, 13 April 2018, pp.28
- XIII. **GSM ve Wi-Fi Bantlarına Yönelik İki Katmanlı Metamalzeme Hasatlayıcı**  
Karakaya E., BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
Yoğun Madde Fiziği – İzmir Toplantısı, Turkey, 13 April 2018, pp.41
- XIV. **Bant Genişliği ve İletim Oranı Artırılmış Elektromanyetik İndüklenmiş Saydamlık-Benzeri Metamalzeme**  
Demirkap Ö., BAĞCI F., Karakaya E., AKAOĞLU B.  
23. Yoğun Madde Fiziği – Ankara Toplantısı, Turkey, 22 December 2017
- XV. **Ayrık ve Kapalı Halka Rezonatörlü Metamalzemeler ile Geliş Açısı ve Kutupluluktan Bağımsız Elektromanyetik İndüklenmiş Saydamlık**  
BAĞCI F., AKAOĞLU B.  
23. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 22 December 2017
- XVI. **Ayrık Halka Rezonatörler ile 1.8 GHz ve 2.6 GHz Frekanslarda Elektromagnetik Enerji Hasatlama**  
Karakaya E., BAĞCI F., Mülazimoğlu C., YILMAZ A. E., AKAOĞLU B.

23. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 22 December 2017
- XVII. **Metamalzeme Yapılar Kullanılarak Çift-Bantlı Kutupluluktan Bağımsız Enerji Hasatlama**  
Mülazimoğlu C., Karakaya E., BAĞCI F., YILMAZ A. E., AKAOĞLU B.  
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