



# Prof. Dr. YASA EKŞİOĞLU ÖZOK

-mWTloQAAAAJ

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## EDUCATIONAL INFORMATION

Degree	University	Department	Year(s)
Doctoral Degree	Koç University	Physics	2007 - 2011
Master's Degree	Istanbul University	Department of Physics	2002 - 2006
Bachelor's Degree	Istanbul University	Department of Physics	1998 - 2002

## RESEARCH AREAS

Optics, Plasmonics, Sensors

## ACADEMIC DUTIES

Duty	University	Area	Year(s)
Professor	Altınbaş University	Electrical Electronics Engineering	2023 -
Associate Professor	Altınbaş University	Department of Electrical and Electronics Engineering	2019 - 2023
Assistant Professor	Altınbaş University	Department of Electrical and Electronics Engineering	2015 - 2019
Instructor (Visiting Postdoctoral Researcher)	Ecole Polytechnique Fédérale De Lausanne, Epfl (the Federal Institute of Technology, Lausanne)	Bioengineering	2014 - 2014
Instructor (Phd) (Excellent Young Researcher At But No. Cz.1.07/2.3.00/30.0039 of Brno University Oftechnology (2013 - 2015))	Brno Higher Technical School	Physics Engineering	2013 - 2015

## ADMINISTRATIVE DUTIES

Duty	University	Year(s)
Central Research Laboratory Director	Altınbaş University	2024 -
Vice Dean	Altınbaş University	2022 -
Head of Department	Altınbaş University	2021 - 2024
Director of Vocational School	Altınbaş University	2020 -

## ACADEMIC AND PROFESSIONAL MEMBERSHIPS

Organisation	Membership	Year(s)
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## NON-UNIVERSITY EXPERIENCE

Country	Organisation	Duty	Year(s)
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## BOOKS

## ARTICLES

**ARTICLES****Broad-band conical-shaped perfect absorber metamaterial for solar cells**

DURMAZ HABİBE, Li Yuyu, EKŞİOĞLU YASA

SOLAR ENERGY MATERIALS AND SOLAR CELLS, 2023

[International](#) DOI: 10.1016/j.solmat.2023.112569**Metamaterial Solar Absorber Based on TiN/TiO<sub>2</sub> Multilayer Taper Structure**

M-Ramzi Mustafa Imad, EKŞİOĞLU YASA, DURMAZ HABİBE

Plasmonics, 2023

[International](#)**Sub-diffraction focusing of light by aperiodic masks**

Mostafavi Seyyeddyako, NUTKU FERHAT, EKŞİOĞLU YASA

JOURNAL OF MODERN OPTICS, 2022

[International](#)**A new and effective method for human retina optic disc segmentation with fuzzy clustering method based on active contour model**

Abdullah Ahmed S, RAHEBİ CEVAT, EKŞİOĞLU ÖZOK YASA, Aljanabi Mohanad

Medical &amp; Biological Engineering &amp; Computing, 2020

[International](#)**Correction to: A new and effective method for human retina optic disc segmentation with fuzzy clustering method based on active contour model**

Abdullah Ahmad S., RAHEBİ CEVAT, EKŞİOĞLU ÖZOK YASA, Aljanabi Mohanad

Medical &amp; Biological Engineering &amp; Computing, 2019

[International](#) DOI: 10.1007/s11517-019-02086-8**Multi-Band Plasmonic Platform Utilizing UT-Shaped Graphene Antenna Arrays**

EKŞİOĞLU ÖZOK YASA, Cetin Arif E, DURMAZ HABİBE

Plasmonics, 2018

[International](#) DOI: 10.1007/s11468-017-0607-0**Skin Lesion Segmentation Method for Dermoscopy Images Using Artificial Bee Colony Algorithm**

Aljanabi Mohanad, EKŞİOĞLU ÖZOK YASA, RAHEBİ CEVAT, Abdullah Ahmad S.

Symmetry, 2018

[International](#) DOI: 10.3390/sym10080347**A novel method for retinal optic disc detection using bat meta-heuristic algorithm**

Abdullah Ahmad S., EKŞİOĞLU ÖZOK YASA, RAHEBİ CEVAT

Medical &amp; Biological Engineering &amp; Computing, 2018

[International](#) DOI: 10.1007/s11517-018-1840-1**An investigation of Update Information Equations by using The Artificial Bee Colony Method for Skin Cancer Detection**

Aljanabi Mohanad, RAHEBİ CEVAT, EKŞİOĞLU ÖZOK YASA

International Journal of Computer Science and Network Security, 2018

[International](#)**Extraordinary Transmission Characteristics of Subwavelength Nanoholes with Rectangular Lattice**

ÇETİN ARİF ENGİN, DRASATA MARTIN, EKŞİOĞLU ÖZOK YASA, JIRI PETRACEK

Plasmonics, 2016

[International](#) DOI: 10.1007/s11468-016-0311-5**Optical Response of Plasmonic Nanohole Arrays Comparison of Square and Hexagonal Lattices**

EKŞİOĞLU ÖZOK YASA, Çetin Arif Engin, Petracek Jiri

Plasmonics, 2016

[International](#) DOI: 10.1007/s11468-015-0118-9

## ARTICLES

### Plasmonic Nanohole Arrays on a Robust Hybrid Substrate for Highly Sensitive Label Free Biosensing

Çetin Engin Arif,Etezadi Dordaneh,Galarreta Betty C , Busson Mickael P,EKŞİOĞLU ÖZOK YASA,Altuğ Hatice  
ACS Photonics, 2015

International DOI: 10.1021/acsphotonics.5b00242

### Dynamical analysis of double ring resonator with non instantaneous Kerr response and effect of loss

EKŞİOĞLU ÖZOK YASA,Petracek Jiri

Optical and Quantum Electronics, 2015

International DOI: 10.1007/s11082-015-0210-6

### Simulation of self pulsing in Kerr nonlinear coupled ring resonators

Petracek Jiri,EKŞİOĞLU ÖZOK YASA,Sterkhova Anna

Optics Communications, 2014

International DOI: 10.1016/j.optcom.2013.12.035

### Dissipative Josephson junction of an optical soliton and a surface plasmon

EKŞİOĞLU ÖZOK YASA,MÜSTECAPLIOĞLU ÖZGÜR ESAT,GÜVEN KAAAN

Physical Review A, 2013

International DOI: 10.1103/PhysRevA.87.023823

### Dynamical analysis of a weakly coupled nonlinear dielectric waveguide Surface plasmon model as another type of Josephson junction

EKŞİOĞLU ÖZOK YASA,MÜSTECAPLIOĞLU ÖZGÜR ESAT,GÜVEN KAAAN

Physical Review A, 2011

International DOI: 10.1103/PhysRevA.84.033805

### Matter wave interferometry in periodic and quasi periodic arrays

EKŞİOĞLU ÖZOK YASA,VIGNOLO PATRIZIA,TOSI MARIO

Optics Communications, 2004

International DOI: 10.1016/j.optcom.2004.10.036

## PROCEEDINGS

### Çok Katmanlı Konik yapıda TiN/TiO<sub>2</sub> Güneş Enerjisi Soğurucu MetaMalzeme

M-Ramzi Mustafa Imad,EKŞİOĞLU YASA,DURMAZ HABİBE

26. Physics of Liquids National Workshop, 2023

National

### Graphene Plasmonic Dual-Band Antenna

EKŞİOĞLU YASA,DURMAZ HABİBE,ERTURAN AHMET MURAT

3rd International Symposium of Scientific Research and Innovative Studies, 2023

International

### U-Shaped Graphene Plasmonic Antenna

EKŞİOĞLU YASA,DURMAZ HABİBE,ERTURAN AHMET MURAT

The 16th International Scientific Research Congress - Science and Engineering, 2023

International

### $\pi$ -Shaped Graphene Plasmonic Antenna

EKŞİOĞLU YASA,DURMAZ HABİBE,ERTURAN AHMET MURAT

3rd International Conference on Access to Recent Advances in Engineering and Digitalization, 2023

International

### UT Shaped Multi-Band Graphene Antenna

EKŞİOĞLU YASA

5th International Congress on Engineering Sciences and Multidisciplinary Approaches, 2023

International

## PROCEEDINGS

### **Multi-Band Graphene Plasmonic Shaped Antenna**

EKŞİOĞLU YASA,DURMAZ HABİBE,ERTURAN AHMET MURAT

3rd International Acharaka Congress on Life, Engineering, and Applied Sciences, 2023

International

### **Investigation of plasmonic transmission in UT shaped graphene arrays**

EKŞİOĞLU ÖZOK YASA,Cetin Arif E

SPIE OPTICS OPTOELECTRONICS, 2017

International

### **Effect of Lattice Geometry on Optical Transmission through Subwavelength Nanohole Arrays**

Cetin Arif E,Drzata Martin,EKŞİOĞLU YASA,Petracek Jiri

METAMATERIALS 2016, 2016

International

### **Self pulsing in nonlinear Kerr type coupled ring resonators with effect of loss**

EKŞİOĞLU YASA,Petracek Jiri

Nonlinear Optics and Applications IX, 2015

International

### **Physics and advanced simulations of photonic and plasmonic structures**

Richter Ivan,Kwiecien Pavel,Jan Fiala,JIRI PETRACEK,EKŞİOĞLU ÖZOK YASA,Vladimr Kuzmiak,Ctyroky Jiri

2014 16th International Conference on Transparent Optical Networks (ICTON), 2014

International

### **Self pulsing and chaos in coupled ring resonators with non instantaneousKerr nonlinear response**

EKŞİOĞLU ÖZOK YASA,PETRACEK JIRI

NUSOD14, 2014

International

### **Self pulsing and chaos in Kerr nonlinear coupled ring resonators**

EKŞİOĞLU YASA,petracek jiri

2014 16th International Conference on Transparent Optical Networks (ICTON), 2014

International

### **Dynamical properties of a coupled nonlinear dielectric waveguide x2014 Surface plasmon system as a new type of Josephson junction**

EKŞİOĞLU YASA,MÜSTECAPLIOĞLU ÖZGÜR ESAT,GÜVEN KAAAN

16th International Conference on Optical MEMS and Nanophotonics, 2011

International

### **Dynamical properties of a coupled nonlinear dielectric waveguide surface-plasmon josephson junction system**

EKŞİOĞLU YASA,MÜSTECAPLIOĞLU ÖZGÜR ESAT,GÜVEN KAAAN

15. Physics of Liquids National Workshop, 2011

National

### **Dynamical properties of a coupled nonlinear dielectric waveguide - surface-plasmon system as another type of Josephson junction**

EKŞİOĞLU YASA,MÜSTECAPLIOĞLU ÖZGÜR ESAT,GÜVEN KAAAN

Proceedings of SPIE, 2011

International

### **The behavior of one-and two-Component Bose-Einstein Condensation in a 1D optical lattice**

EKŞİOĞLU YASA,MÜSTECAPLIOĞLU ÖZGÜR ESAT

15th Istanbul Statistical Physics Days, 2008

National

## PROCEEDINGS

### The role of fibonacci sequence in the transport of Bose-Einstein condensate atoms in optical lattices

EKŞİOĞLU YASA, AKDENİZ KAMİL GEDİZ

Six International Conference of the Balkan Physical Union Book Series: AIP CONFERENCE PROCEEDINGS, 2006

International

### Bose Einstein Condensation,

EKŞİOĞLU YASA

Disordered Systems: Theory and Its Applications, V. National Symposium, 2005

National

### Transport of matter through a Bose-Einstein condensate in optical lattices,

EKŞİOĞLU YASA, Vignolo Patrizia, AKDENİZ ZEHRA, Tosi Mario

12th Istanbul Statistical Physics Days, 2005

National

### Condensate Localization in a Quasi Periodic Structure

vingolo patrizia, EKŞİOĞLU ÖZOK YASA, tosi mario

the Thirteenth International Laser Physics Workshop (LPHYS'04), 2004

International

### Transmittivity of Bose- Ein-stein condensate on periodic and quasi-periodic lattices

EKŞİOĞLU YASA, Vignolo Patrizia, AKDENİZ ZEHRA, Tosi Mario

VII. Physics of Liquids National Workshop, 2003

National

## PROJECTS

### Polarizasyondan Bağımsız Metamalzeme Tabanlı Geniş Bant Soğurucu (Executive)

Scientific research project supported by Higher Education Institutions, 28.01.2022 - 10.05.2023

National Completed

## THESIS SUPERVISION

### PLASMONIC METAMATERIAL TİN/TİO<sub>2</sub> MULTILAYER SOLAR CELLS

MUSTAFA IMAD M-RAMZI M-RAMZI

2023 Master's Degree

### X bant mikroşerit halka yama anten tasarımı ve besleme türlerine göre performanslarının değerlendirilmesi

MELİH HACİMEHMET

2021 Master's Degree

### Automated liver tumor segmentation and classification using AI and fully convolutional neural network (CNN)

IDREES AHMED DHAHİR DHAHİR

2021 Master's Degree

### BASE STATION DIAGNOLIZATION FOR CELLULAR NETWORKS: CLUSTERING AND SCHEDULING

ALI SAADOON MUSHİB JANABI

2021 Master's Degree

### Vehicle position estimation and vehicle classification using deep convolutional neural networks

BASHAER ISAM HASAN KABEAYLA

2021 Master's Degree

### Disaster rescue and management using wireless ad-hoc networks

ABDULMOHSİN ALDGMAN

2020 Master's Degree

## THESIS SUPERVISION

### OPTIC DISC LOCALIZATION AND SEGMENTATION IN THE HUMAN RETINAL IMAGE USING NEW ALTERNATIVE METHODS

AHMED SULAIMAN ABDULLAH AL-OGAIDI

2018 | Doctorate

### MELANOMA SKIN CANCER SEGMENTATION BASED ON HEURISTIC METHOD COMPARED WITH CONVENTIONAL METHODS

MOHANAD HASAN ALI AL JANABI

2018 | Doctorate

### Classification system ids alerts by using data mining technique

NOOR ABDULKHALEQ ALAZZAWI

2017 | Master's Degree

### Estimation of heart disease based on data mining using patients health database

AZHAR HATEM JEBUR AL BAIDHANI

2017 | Master's Degree

## COURSES

Course Type	Course Code	Course Name
Bachelor's Degree	EE201	CIRCUIT THEORY I
Bachelor's Degree	EE315	ANALOGUE ELECTRONICS
Master's Degree	ECE500	ADVANCED ENGINEERING MATHEMATICS
Bachelor's Degree	EE205	DC CIRCUIT ANALYSIS
Bachelor's Degree	EE207	DC CIRCUIT ANALYSIS AND DESIGN
Bachelor's Degree	EE206	AC CIRCUIT ANALYSIS
Bachelor's Degree	EE222	ELECTROMAGNETIC THEORY
Bachelor's Degree	EE309	ANALOGUE ELECTRONICS AND DESIGN
Bachelor's Degree	EE208	AC CIRCUIT ANALYSIS
Bachelor's Degree	ELK207	DC DEVRE ANALİZİ VE TASARIMI

## PERSONAL INFORMATION

### CONTACT INFORMATION

Interview Hours: Pazartesi - 13:30 - 14:30

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