

## Assoc. Prof. Özlem YAĞCI

### Personal Information

Office Phone: [+90 212 383 8000](tel:+902123838000)

Web: <https://avesis.yildiz.edu.tr/oyagci>

### International Researcher IDs

ORCID: 0000-0002-7394-7479

Publons / Web Of Science ResearcherID: HKM-4025-2023

ScopusID: 55900598100

Yoksis Researcher ID: 118849

### Education Information

Doctorate, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, Turkey 2011 - 2016

Postgraduate, Marmara University, Faculty Of Arts And Sciences, Physics, Turkey 2008 - 2011

Undergraduate, Kocaeli University, Fen Edebiyat Fakültesi, Fizik, Turkey 2004 - 2008

### Dissertations

Doctorate, Borikasıit katkılanmış ve gama ışını dozlanmış PEDOT: PSS tabakasının P3HT:PCBM esaslı fotovoltaiik hücrelerde kullanılması, Yildiz Technical University, Faculty of Arts & Science, Department of Physics, 2016

Postgraduate, Organik tabanlı güneş pillerinin üretimi ve karakterizasyonu, Marmara University, Fen - Edebiyat Fakültesi, Fizik Bölümü, 2011

### Research Areas

Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures

### Academic Titles / Tasks

Lecturer PhD, Yildiz Technical University, Rectorate, -, 2013 - Continues

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

- I. **ZnO-NF/Graphene/Nafion as electrode platform for some pharmaceutical active ingredients sensor and energy storage applications**  
Koçyiğit N., Dinç Zor Ş., Yağci Ö., Uzunçam Ş. B., Arvas M. B.  
SYNTHETIC METALS, 2025 (SCI-Expanded)
- II. **Synthesis of co-doped metal dichalcogenides (MoS<sub>2</sub>:WS<sub>2</sub>) on carbon felt electrode by hydrothermal method and supercapacitor application**  
Yağci Ö., Arvas M. B., Yazar Aydoğan S.

MATERIALS CHEMISTRY AND PHYSICS, 2025 (SCI-Expanded)

- III. **Furoic acid-doped-over-oxidized poly (3, 4-ethylenedioxythiophene)-based electrochemical sensor for selective, sensitive and concurrent quantification of paracetamol, codeine phosphate and caffeine in pharmaceutical formulation**  
Koçyiğit N., Dinç Zor Ş., Yağci Ö., Arvas M. B.  
JOURNAL OF MATERIALS RESEARCH, 2025 (SCI-Expanded)
- IV. **Impact of Boehmite and Gibbsite on the supercapacitor performances of Polypyrrole:  $\gamma$ -Al(OH)/PPy/CF and  $\gamma$ -Al(OH)<sub>3</sub>/PPy/CF flexible and wearable nanocomposites**  
Arvas M. B., Yaylagül S., Uzbiçen K., Koçyiğit N., Yağci Ö.  
JOURNAL OF ALLOYS AND COMPOUNDS, 2025 (SCI-Expanded)
- V. **One-step chronoamperometric synthesis of S, N co-doped graphene oxide electrodes for nonenzymatic electrochemical H<sub>2</sub>O<sub>2</sub> sensor**  
Koçyiğit N., Dinç Zor Ş., Yağci Ö., Arvas M. B.  
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, 2024 (SCI-Expanded)
- VI. **Effect of Mo and W co-doping on optical, morphological, electrical and electrochemical properties of Co<sub>3</sub>O<sub>4</sub> thin film**  
Yağci Ö.  
PHYSICA B: CONDENSED MATTER, 2024 (SCI-Expanded)
- VII. **The effect of zinc and sodium borate doping on the structural, morphological, optical, electrical and electrochemical properties of PEDOT:PSS thin film electrodes for flexible and transparent supercapacitor applications**  
YAĞCi Ö., ARVAS M. B., AYDIN YÜKSEL S.  
New Journal of Chemistry, vol.48, no.9, pp.4096-4108, 2024 (SCI-Expanded)
- VIII. **The effect of boron doping on the optical, morphological and structural properties of Cu<sub>3</sub>SbS<sub>3</sub> thin films prepared via spin coating**  
Yağci Ö., Aydın Yüksel S., Bozkurt K., Altındal A.  
NEW JOURNAL OF CHEMISTRY, 2023 (SCI-Expanded)
- IX. **Effect of gamma irradiation on structural, morphological, optical and thermal properties of Ca doped CuO nanostructure thin films**  
YAĞCi Ö.  
Radiation Effects and Defects in Solids, vol.178, no.3-4, pp.521-538, 2023 (SCI-Expanded)
- X. **Improving the electrical conductivity and electrochemical properties of PEDOT:PSS thin films by Ca and Mg doping**  
YAĞCi Ö., ÖZDEMİR O. K.  
POLYMER BULLETIN, vol.79, no.12, pp.11493-11509, 2022 (SCI-Expanded)
- XI. **Facile and single step produced Ba:Sn-codoped PEDOT:PSS thin film electrode with improved optics and electrochemical properties for transparent and flexible supercapacitor applications**  
YAĞCi Ö., ARVAS M. B., YAZAR AYDOĞAN S.  
New Journal of Chemistry, vol.46, no.46, pp.22130-22142, 2022 (SCI-Expanded)
- XII. **Thermal, structural and morphological properties of polypropylene and high density polyethylene polymer composites filled with waste urea formaldehyde**  
Yağci Ö., Gümüş B., Taşdemir M.  
POLYMER BULLETIN, 2022 (SCI-Expanded)
- XIII. **High-density polyethylene/artichoke leaf powder polymer composites: dynamic mechanical, morphological and thermal properties**  
Gümüş B., Yağci Ö., Taşdemir M.  
Iranian Polymer Journal, 2022 (SCI-Expanded)
- XIV. **Effervescence-assisted liquid phase microextraction prior to slotted quartz tube-flame atomic absorption spectrometry for cadmium determination in domestic wastewater samples**  
Borahan T., Karlıdağ N. E., YAĞCi Ö., BAKIRDERE S.  
Chemical Papers, vol.75, pp.6307-6314, 2021 (SCI-Expanded)

- XV. **Preconcentration of tellurium using magnetic hydrogel-assisted dispersive solid-phase extraction and its determination by slotted quartz tube-flame atomic absorption spectrophotometry**  
Demir C., ÖZTÜRK ER E., Kartoglu B., Atsever N., YAĞCI Ö., Oner M., BAKIRDERE S.  
CHEMICAL PAPERS, vol.75, no.8, pp.4261-4267, 2021 (SCI-Expanded)
- XVI. **Thermal, structural and dynamical mechanical properties of hollow glass sphere-reinforced polypropylene composites**  
YAĞCI Ö., Eker Gumus B., TAŞDEMİR M.  
POLYMER BULLETIN, vol.78, no.6, pp.3089-3101, 2021 (SCI-Expanded)
- XVII. **THERMAL, STRUCTURAL AND MORPHOLOGICAL CHARACTERIZATION OF DENTAL POLYMERS FOR CLINICAL APPLICATIONS**  
Benli M., Gümüş B., Kahraman Y., Yağci Ö., Ceylan Erdoğan D.  
JOURNAL OF PROSTHODONTIC RESEARCH, vol.65, no.2021, pp.1-9, 2020 (SCI-Expanded)
- XVIII. **Nano-sized magnetic Ni particles based dispersive solid-phase extraction of trace Cd before the determination by flame atomic absorption spectrometry with slotted quartz tube: a new, accurate, and sensitive quantification method**  
YAĞCI Ö., Akkaya E., BAKIRDERE S.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.192, no.9, 2020 (SCI-Expanded)
- XIX. **Ethanol sensing with pure and boric acid doped electrospun CuInS<sub>2</sub> nanofibers in the presence of relative humidity**  
YAĞCI Ö., Arat R., Sarier N., Omur B. C., ALTINDAL A.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.104, 2019 (SCI-Expanded)
- XX. **Dynamical Mechanical Properties of Polypropylene Composites Filled with Olive Pit Particles**  
EKER GÜMÜŞ B., YAĞCI Ö., CEYLAN ERDOĞAN D., Taşdemir M.  
JOURNAL OF TESTING AND EVALUATION, pp.1-12, 2019 (SCI-Expanded)
- XXI. **Investigating the performance of P3HT:PCBM organic solar cells involving gamma-irradiated PEDOT:PSS layer**  
YAĞCI Ö., YEŞİLKAYA S. S., Okutan M., İÇELLİ O.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.172, pp.805-814, 2017 (SCI-Expanded)
- XXII. **Gamma-ray irradiation effect on mechanical and dielectric properties of volcanic basalt mineral reinforced low density polyethylene films**  
Kılıç M., Karabul Y., Alkan U., Yağci Ö., Okutan M., Okutan M., İçelli O.  
Physicochemical Problems of Mineral Processing, vol.53, no.1, pp.578-590, 2017 (SCI-Expanded)
- XXIII. **Effect of boric acid doped PEDOT:PSS layer on the performance of P3HT: PCBM based organic solar cells**  
YAĞCI Ö., YEŞİLKAYA S. S., Yuksel S., Ongul F., VARAL N. M., KUS M., GÜNEŞ S., İÇELLİ O.  
SYNTHETIC METALS, vol.212, pp.12-18, 2016 (SCI-Expanded)
- XXIV. **Photon parameters for gamma-rays sensing properties of some thick oxide films**  
Kavanoz H. B., Yağci Ö., Yalçın Z., İçelli O., Altındal A., Okutan M., Mann K. S.  
VACUUM, vol.101, pp.238-245, 2014 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Electrochemical, Optical and Morphological Characterizations of Cu Doped ZnO Nanostructure Thin Films Prepared by Spin Coating Method**  
Yağci Ö.  
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.21, pp.1306-1314, 2021 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **Üçlü Bakır, Bor ve Kobalt Katkılı PEDOT:PSS İnce Filmlerinin Morfolojik, Yapısal, Optik ve Elektrokimyasal Özellikleri**  
Yağci Ö., Özdemir O. K.  
35. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 9 - 12 September 2024
- II. **S, N eş katkılı grafen oksit elektrotların kronoamperometrik yöntem ile tek adımlı sentezi ve H<sub>2</sub>O<sub>2</sub> elektrokimyasal sensörü**  
Koçyiğit N., Dinç Zor Ş., Yağci Ö., Arvas M. B.  
35. Ulusal Kimya Kongresi, Diyarbakır, Turkey, 9 - 12 September 2024
- III. **Production and characterization of copper antimony sulfide films for solar cell applications**  
Çelik E., Yağci Ö., Aydın Yüksel S.  
Türk Fizik Derneği 40. Uluslararası Fizik Kongresi, Muğla, Turkey, 2 - 06 September 2024
- IV. **Kalsiyum Katkılanmış Bakır Oksit İnce Filmlerin Morfolojik ve Yapısal Karakterizasyonları**  
Yağci Ö.  
33. Ulusal Kimya Kongresi , Tekirdağ, Turkey, 7 - 09 October 2021, pp.1
- V. **Morphological and Optical Properties of Cu Doped ZnO Nanostructure**  
Yağci Ö.  
IMSTEC 2020, Nevşehir, Turkey, 16 - 18 October 2020, pp.1
- VI. **Kalsiyum Klorür Dihidrat'ın PEDOT:PSS İnce Filmlerinin Yüzey Morfolojisi, Optik, Yapısal Ve Termal Özellikleri Üzerindeki Etkisi**  
Yağci Ö.  
UKMK 2018 , Van, Turkey, 3 - 06 September 2018, pp.1
- VII. **OPTICAL, STRUCTURAL AND THERMAL PROPERTIES OF PEDOT:PSS THIN FILMS DOPED WITH NORYL**  
Yağci Ö., İçelli O.  
IMSMATEC 2018, İzmir, Turkey, 10 - 12 April 2018, pp.1
- VIII. **PREPARATION OF PEDOT:PSS POWDER DOPED WITH BORAX**  
Yağci Ö.  
IMSMATEC 2018, İzmir, Turkey, 10 - 12 April 2018, pp.1
- IX. **Effect of Boric Acid Doped Pedot:PSS Layer on the Photovoltaic Parameters of P3HT:PCBM Based PV Cell**  
Eyecioglu O., Beken M., Yağci Ö., İÇELLİ O.  
7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.973-975
- X. **The ANFIS as a Prediction Method of Efficiency of PV Cells**  
Beken M., Kayisli K., Eyecioglu O., Yağci Ö., İÇELLİ O.  
7th International Conference on Renewable Energy Research and Applications (ICRERA), Paris, France, 14 - 17 October 2018, pp.1389-1391
- XI. **Effect of Impurity Doping on the Optical Properties ZnS Films**  
Ulutaş Ü., YEŞİLKAYA S. S., KARABUL Y., YAĞCI Ö.  
TPS-33 International Physics Congress, Muğla, Turkey, 06 September 2017, pp.603
- XII. **Electrospun nanofibers of boric acid doped copper indium disulfide**  
YAĞCI Ö., Arat R., SARIER N., ALTINDAL A.  
TFD 33, 6 - 10 September 2017
- XIII. **Polydopamine coated glass bubbles for removing copper ions from aqueous solutions**  
YAĞCI Ö., CEYLAN ERDOĞAN D., KAHRAMAN Y., ORUÇ M. E.  
TFD 33, 6 - 10 September 2017
- XIV. **Effect of Low Dose Gamma Radiation on Boricacid doped PEDOT PSS films**  
YAĞCI Ö., YEŞİLKAYA S. S., İÇELLİ O.  
TFD 32 International Physics ConferenceI, 6 - 09 September 2016
- XV. **Use of boron mineral wastes in the photovoltaic applications**

YAĞCI Ö., YEŞİLKAYA S. S., İÇELLİ O.

TFD31, 21 - 24 July 2016

**XVI. Dielectric Characterization of Conducting Polymers Borax Composites**

KILIÇ M., KARABUL Y., ERDÖNMEZ S., BULGURCUOĞLU A. E., YAĞCI Ö., ALKAN Ü., OKUTAN M., İÇELLİ O.

oemt2016, 17 - 19 May 2016

**XVII. Dielectric Characterization of Conducting Polymers/Borax Composites**

KILIÇ M., KARABUL Y., ERDÖNMEZ S., BULGURCUOĞLU A. E., YAĞCI Ö., ALKAN Ü., OKUTAN M., İÇELLİ O.

2nd International Conference on Organic Electronic Material Technologies (OEMT-2016), Çanakkale, Turkey, 17 - 19 May 2016

**XVIII. In the Room Conditions Improved Efficiency of Organic Solar Cells Using of Boron Compounds**

YAĞCI Ö., YEŞİLKAYA S. S., AYDIN YÜKSEL S., ONGÜL F., TÜRKÖĞLU BOZAR S., GÜNEŞ S., İÇELLİ O.

1st International Conference on Organic Electronic Material Technologies, Elazığ, Turkey, 25 - 27 March 2015, pp.105

**XIX. Photon parameters for gamma-rays and gas sensing properties of some thick oxide films**

YAĞCI Ö., KAVANOZ H. B., YALÇIN Z., ALTINDAL A., İÇELLİ O., OKUTAN M.

TFD 30 - Türk Fizik Derneği 30. Uluslararası Fizik Kongresi, 2 - 05 September 2013

## Supported Projects

YAĞCI Ö., ÖZDEMİR O. K., ÖZDEMİR O., BOZKURT K., Project Supported by Higher Education Institutions, Borik Asit Katkılanmış Cu<sub>3</sub>SbS<sub>3</sub> Tabakasının Silikon Tabanlı Fotovoltaik Hücrelerde Kullanılması, 2021 - 2023

Yeşilkaya S. S., İçelli O., TÜBİTAK Project, Usage of Boron Mineral Wastes in Photovoltaic Applications, 2014 - 2016

YAĞCI Ö., İÇELLİ O., Project Supported by Higher Education Institutions, Farklı Metal Grupları İçeren Ftalosiyanınlerin Foto-Voltaik Uygulamalarda Kullanılması, 2013 - 2016

## Patent

Yağci Ö., PEDOT:PSS Film ve Üretimi, Patent, CHAPTER G Physics, The Invention Registration Number: 2022016608 , Standard Registration, 2024

İçelli O., Güneş S., Aydın Yüksel S., Yeşilkaya S. S., Yağci Ö., PEDOT:PSS film üretiminde borik asit kullanımı, Patent, CHAPTER G Physics, The Invention Registration Number: TR201508718B , Standard Registration, 2021

Yeşilkaya S. S., İçelli O., Yağci Ö., Usage of Boric Acid in the Production of PEPOT:PSS Film, Patent, CHAPTER G Physics, The Invention Registration Number: US20180287083A1 , Standard Registration, 2019

## Activities in Scientific Journals

Royal Society of Chemistry, Evaluation Committee Member, 2022 - Continues

## Metrics

Publication: 44

Citation (WoS): 49

Citation (Scopus): 122

H-Index (WoS): 3

H-Index (Scopus): 6

## **Congress and Symposium Activities**

33. Kimya Kongresi, Session Moderator, Tekirdađ, Turkey, 2021

## **Scholarships**

2211-C Öncelikli Alanlara Yönelik Yurt İçi Doktora Burs Programı , TUBITAK, 2013 - 2016

## **Awards**

Yađci Ö., Onur Öğrencisi, Kocaeli Üniversitesi , June 2007