

## Arş. Gör. Ozan TOKER

### Kişisel Bilgiler

E-posta: ozant@yildiz.edu.tr

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

### Uluslararası Araştırmacı ID'leri

ORCID: 0000-0002-5566-0298

ScopusID: 57202340458

Yoksis Araştırmacı ID: 267170

### Araştırma Alanları

Tıp, Sağlık Bilimleri, Dahili Tıp Bilimleri, Nükleer Tıp, Radyasyon Onkolojisi, Fizik, Disiplinlerarası Fizik ve İlgili Bilim ve Teknoloji Alanları, Biyolojik ve tıbbi fizik, Malzeme Bilimi, Nükleer Fizik, Temel Bilimler

### Akademik Unvanlar / Görevler

Araştırma Görevlisi, Yıldız Teknik Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2017 - Devam Ediyor

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. A Monte Carlo-based approach to determine effective atomic numbers of low-Z explosives in landmines  
ÖZSAHİN TOKER M., Yavas K., TOKER O., İÇELLİ O.  
Radiation Effects and Defects in Solids, 2025 (SCI-Expanded)
- II. An alternative approach for determining the effective atomic number of some compounds: Monte Carlo study  
Ozsahin M., KALECİK S., TOKER O., KURUCU Y., İÇELLİ O.  
Radiation Physics and Chemistry, cilt.215, 2024 (SCI-Expanded)
- III. An investigation on compatibility of experimental effective atomic numbers of some Fe-Ni alloys with those predicted by MCNP  
KALECİK S., YILMAZ D., KURUCU Y., GÜROL A., TOKER O., İÇELLİ O.  
RADIATION PHYSICS AND CHEMISTRY, cilt.202, 2023 (SCI-Expanded)
- IV. Monte Carlo study on size-dependent radiation enhancement effects of spinel ferrite nanoparticles  
Bilmez B., Toker M. O., TOKER O., İÇELLİ O.  
RADIATION PHYSICS AND CHEMISTRY, cilt.199, 2022 (SCI-Expanded)
- V. A comparative study on applicability and efficiency of machine learning algorithms for modeling gamma-ray shielding behaviors  
Bilmez B., TOKER O., ALP S., ÖZ E., İÇELLİ O.  
NUCLEAR ENGINEERING AND TECHNOLOGY, cilt.54, sa.1, ss.310-317, 2022 (SCI-Expanded)
- VI. Efficiency analysis of multiple detector effects on MCNP 6.2 simulations  
AKÇALI Ö., TOKER O., Bilmez B., İÇELLİ O.  
Progress in Nuclear Energy, cilt.139, 2021 (SCI-Expanded)
- VII. Practical simulation method for determination of effective atomic number from Rayleigh to Compton

- scattering ratio by MCNP**  
TOKER O., Bilmez B., AKÇALI Ö., Özşahin Toker M., İÇELİ O.  
Radiation Physics and Chemistry, cilt.181, 2021 (SCI-Expanded)
- VIII. **Evaluation of three different glassy composites (quinary matrix designed using Cr<sub>2</sub>O<sub>3</sub>/Na<sub>2</sub>O/MnO<sub>2</sub>) in respect of radiation shielding behaviors**  
TOKER O., Bilmez B., Toker M. O., KAVANOZ H. B., AKÇALI Ö., YILMAZ M., İÇELİ O.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, cilt.176, sa.9-10, ss.967-981, 2021 (SCI-Expanded)
- IX. **An investigation on gamma-ray shielding properties of quaternary glassy composite (Na<sub>2</sub>Si<sub>3</sub>O<sub>7</sub>/Bi<sub>2</sub>O<sub>3</sub>/ B<sub>2</sub>O<sub>3</sub>/Sb<sub>2</sub>O<sub>3</sub>) by BXCOM and MCNP 6.2 code**  
AKÇALI Ö., Çağlar M., TOKER O., Bilmez B., KAVANOZ H. B., İÇELİ O.  
Progress in Nuclear Energy, cilt.125, 2020 (SCI-Expanded)
- X. **Comparison of ITO and ZnO ternary glassy composites in terms of radiation shielding properties by Monte Carlo N-particle transport code and BXCOM**  
TOKER O., Bilmez B., KAVANOZ H. B., AKÇALI Ö., İÇELİ O.  
RADIATION AND ENVIRONMENTAL BIOPHYSICS, cilt.59, sa.2, ss.283-293, 2020 (SCI-Expanded)
- XI. **Determination of Trace Element Concentrations in Blood Samples and Their Correlation to Breast Cancer**  
TOPDAĞI Ö., TOKER O., BAKIRDERE S., ÖZ E., Bursalioglu E. O., Abuqbeitah M., Demir M., İÇELİ O.  
ATOMIC SPECTROSCOPY, cilt.41, sa.1, ss.29-35, 2020 (SCI-Expanded)
- XII. **A novel comprehensive utilization of vanadium slag/epoxy resin/antimony trioxide ternary composite as gamma ray shielding material by MCNP 6.2 and BXCOM**  
Kavanoz H. B., Akçalı Ö., Toker O., Bilmez B., Çağlar M., İçelli O.  
Radiation Physics and Chemistry, cilt.165, 2019 (SCI-Expanded)
- XIII. **Radiation interaction parameters for blood samples of breast cancer patients: an MCNP study**  
Toker O., Caglar M., Öz E., Bakirdere S., Topdağı Ö., Eyecioglu O., İçelli O.  
RADIATION AND ENVIRONMENTAL BIOPHYSICS, cilt.58, sa.4, ss.531-537, 2019 (SCI-Expanded)
- XIV. **BXCOM: a software for computation of radiation sensing**  
Eyecioglu O., El-Khayatt A. M., KARABUL Y., Caglar M., TOKER O., İÇELİ O.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, cilt.174, ss.506-518, 2019 (SCI-Expanded)
- XV. **Determination of Se, Cr, Mn, Zn, Co, Na, and K in Blood Samples of Breast Cancer Patients to Investigate Their Variation Using ICP-MS and ICP-OES**  
Toker O., Topdağı Ö., Bakirdere S., Bursalioglu E. O., Öz E., Eyecloglu O., Karabul Y., Çağlar M., İçelli O.  
ATOMIC SPECTROSCOPY, cilt.40, ss.11-16, 2019 (SCI-Expanded)
- XVI. **Correlation between Na/K ratio and electron densities in blood samples of breast cancer patients**  
Topdağı Ö., Toker O., Bakirdere S., Bursalioglu E. O., Öz E., Eyecioglu O., Demir M., İçelli O.  
BIOMETALS, cilt.31, ss.673-678, 2018 (SCI-Expanded)

## Hakemli Bilimsel Toplantılarda Yayımlanmış Bildiriler

- I. **XRF SPECTROSCOPY ANALYSIS OF CEMENT VIA MCNP SIMULATIONS**  
Yavaş K., TOKER O., Özşahin Toker M., AKÇALI Ö., İÇELİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023
- II. **GTV PREDICTION WITH MACHINE LEARNING**  
Kemal Z., Konuk M., TOKER O., İÇELİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023
- III. **OBTAINING DOSE ENHACEMENT FACTORS OF SOME DRUGS VIA MCNP**  
Eminoğlu H. F., Yakut Y., TOKER O., Özşahin Toker M., İÇELİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül

2023

**IV. TUMOUR VOLUME ESTIMATION WITH ARTIFICIAL INTELLIGENCE AND OPTIMUM RADIATION APPLICATION**

Kemal Z., TOKER O., AKÇALI Ö., İÇELLİ O.

TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023

**V. COMPARATIVE ANALYSIS OF EXPERIMENTAL AND SIMULATED X-RAY FLUORESCENCE SPECTRA OF STAINLESS STEELS**

Keskin U., Özşahin Toker M., TOKER O., AKÇALI Ö., İÇELLİ O.

TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023

**VI. INPGEN – A SUPPORTIVE SOFTWARE FOR MONTE CARLO N PARTICLE SIMULATIONS**

Eminoğlu H. F., TOKER O., AKÇALI Ö., İÇELLİ O.

TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023

**VII. COMPARISON OF COMPOSITE AND MULTILAYERED SHIELDING MATERIALS ON MCNP SIMULATIONS**

Yavaş K., TOKER O., Özşahin Toker M., AKÇALI Ö., İÇELLİ O.

TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023

**VIII. MAPPING DOSE DISTRIBUTION OF AN ANGIOGRAPHY CHAMBER WITH MCNP**

Hısiroğlu Ayar K., Keskin U., Özşahin Toker M., TOKER O., İÇELLİ O.

TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Türkiye, 31 Ağustos - 04 Eylül 2023

**IX. Investigation of the effect of flattening filters on photon spectra in medical linac with MCNP 6.2**

Duha A., BİLMEZ B., TOKER O., BAŞTUĞ A., İÇELLİ O.

2nd International Dicle Scientific Studies and Innovation Congress, 2022, Diyarbakır, Türkiye, Diyarbakır, Türkiye, 28 Mayıs 2022, ss.546-556

**X. An investigation of ternary composites as gamma ray shielding material by Monte Carlo simulation and BXCOM**

KAVANOZ H. B., AKÇALI Ö., TOKER O., BİLMEZ B., YILMAZ M., ÇAĞLAR M., İÇELLİ O.

Eighth Bozok Science Workshop, Yozgat, Türkiye, 25 - 27 Temmuz 2019

**XI. A Monte Carlo Simulation Study of Na<sub>2</sub>Si<sub>3</sub>O<sub>7</sub> / Bi<sub>2</sub>O<sub>3</sub> / B<sub>2</sub>O<sub>3</sub> /Sb<sub>2</sub>O<sub>3</sub> quaternary glassy composites for radiation shielding**

AKÇALI Ö., KAVANOZ H. B., TOKER O., BİLMEZ B., ÇAĞLAR M., YILMAZ M., İÇELLİ O.

Eighth Bozok Workshop, Yozgat, Türkiye, 25 - 27 Temmuz 2019

**XII. The Device Design for Thin-Film Coating That Combines Different Techniques for High Efficiency**

Özşahin Toker M., TOKER O., KILIÇ M., BAKIRDERE S., İÇELLİ O.

Balkan 1. Uluslararası Uygulamalı Bilimler Kongresi, Edirne, Türkiye, 5 - 07 Nisan 2019

**XIII. Prediction Of Breast Cancer Pattern Using Artificial Neural Network Algorithms**

TOKER O., ALP S., EYECİOĞLU Ö., TOPDAĞI Ö., BEKEN M., ÖZ E., İÇELLİ O.

International Conference Series Theoretical and Experimental Studies in Nuclear Applications and Technology, 20 - 22 Nisan 2018

**XIV. Classification of breast cancer patients' blood samples using machine learning algorithms**

TOKER O., ALP S., TOPDAĞI Ö., EYECİOĞLU Ö., BEKEN M., ÖZ E., İÇELLİ O.

Theoretical and Experimental Studies in Nuclear Applications and Technology, 20 Nisan 2018

**XV. Investigation of the variations in Se, Cr, Mn, Zn, Co, Na, K concentrations in blood samples of breast cancer patients**

Toker O., Topdağı Ö., Bakirdere S., Bursalioğlu E. O., Öz E., Eyecioğlu Ö., Karabul Y., Çağlar M., İçelli O.

International Advanced Researches and Engineering Congress, Osmaniye, Türkiye, 16 - 18 Kasım 2017, ss.2713

**XVI. Study of electron density via some elements in breast cancer patients' blood samples**

Toker O., Topdağı Ö., Bakirdere S., Bursalioğlu E. O., Öz E., Eyecioğlu Ö., Karabul Y., Çağlar M., İçelli O.

- International Advanced Researches and Engineering Congress, Osmaniye, Türkiye, 16 - 18 Kasım 2017, ss.2714
- XVII. **Correlation between ratio of Na K Se Zn K P Cu Zn Se Fe Ca P at breast cancer patients blood samples which exposed to radiation and their electron density**  
Toker O., KARABUL Y., BURSALIOGLU E. O., BAKIRDERE S., İÇELLİ O., Saribal Kanber D.  
The first International Physics Conference at the Anatolian Peak, Erzurum, Türkiye, 25 Şubat 2016, ss.294
- XVIII. **Correlation between some elements in breast cancer patients' blood and tissue samples and their electron density**  
TOKER O., KARABUL Y., Bursalioğlu E. O., BAKIRDERE S., Saribal D., Eyecioğlu Ö., İÇELLİ O.  
International Physics Conference at Anatolian Peak, Erzurum, Türkiye, 25 Şubat 2016, ss.1

## Metrikler

Yayın: 35  
Atıf (WoS): 73  
Atıf (Scopus): 169  
H-İndeks (WoS): 4  
H-İndeks (Scopus): 6

## Kongre ve Sempozyum Katılımı Faaliyetleri

International Advanced Researches and Engineering Congress, Katılımcı, Osmaniye, Türkiye, 2017  
International Physics Conference at Anatolian Peak, Katılımcı, Erzurum, Türkiye, 2016