

## Assoc. Prof. ÜRKİYE AKAR TARIM

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-4270-2021

ScopusID: 55062460600

Yoksis Researcher ID: 117993

### Education Information

Doctorate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (Dr), Turkey 2010 - 2014

Postgraduate, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (Yl) (Tezli), Turkey 2008 - 2010

Undergraduate, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, Fizik Bölümü, Turkey 2003 - 2007

### Research Areas

Experimental Methods of Particle and Nuclear Physics, Radioactive decay and in-beam spectroscopy

### Academic Titles / Tasks

Associate Professor, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 2019 - Continues

Assistant Professor, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 2017 - 2019

Research Assistant, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 2014 - 2018

Research Assistant, Bursa Uludağ University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik, 2010 - 2014

### Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 2022 - Continues

### Courses

Radyasyon ve Radyasyon Dozimetresi, Doctorate, 2017 - 2018

TEMEL FİZİK II LABORATUVARI, Undergraduate, 2017 - 2018

Nükleer Olaylar için Sayısal Uygulamalar I, Doctorate, 2017 - 2018

Nükleer Olaylar için Sayısal Uygulamalar II, Doctorate, 2017 - 2018

TEMEL FİZİK II, Undergraduate, 2017 - 2018

Temel Fizik I, Undergraduate, 2017 - 2018

## Advising Theses

Akar Tarım Ü., Polimer ve metal matrisli kompozitlerin gama ışını zırhlama malzemesi olarak etkinliklerinin araştırılması, Postgraduate, B.YURTTADUR(Student), 2023

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

- I. **Synergizing electrical, mechanical, and radiation shielding properties of dendritic copper filled epoxy polymer composites**  
Mutlu D., KARAGÖZ İ., Sepetcioglu H., AKAR TARIM Ü., GÜRLER O.  
RADIATION PHYSICS AND CHEMISTRY, vol.216, 2024 (SCI-Expanded)
- II. **Monte Carlo simulation for the interaction characteristics of gamma-rays with several tissues and water as a tissue substitute**  
AKAR TARIM Ü., GÜRLER O., Korkmaz L.  
Radiation Effects and Defects in Solids, vol.178, no.7-8, pp.799-807, 2023 (SCI-Expanded)
- III. **A computational modelling of low-energy gamma ray detection efficiency of a cylindrical NaI(Tl) detector**  
Ahmadi S., Ashrafi S., Yazdansetad F., Roshanshah N., Tarim Ü., Gurler O.  
RADIATION PHYSICS AND CHEMISTRY, 2021 (SCI-Expanded)
- IV. **Screening parameter for elastic scattering of electrons**  
YALÇIN S., AKAR TARIM Ü., GÜRLER O., GÜNDOĞDU Ö., Bradley D. A.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.176, no.9-10, pp.919-939, 2021 (SCI-Expanded)
- V. **Gamma-Ray Attenuation Study for the Soils of Bursa, Turkey, in the Energy Range 59.5-1332.5 keV**  
GÜRLER O., TÜMSAVAŞ Z., AKAR TARIM Ü.  
IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, vol.44, no.4, pp.1161-1166, 2020 (SCI-Expanded)
- VI. **POTENTIAL USE OF CONCRETES FOR GAMMA-RAY SHIELDING**  
GÜRLER O., AKAR TARIM Ü.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.28, pp.10029-10034, 2019 (SCI-Expanded)
- VII. **Evaluation of gamma-ray attenuation properties of bismuth borate glass systems using Monte Carlo method**  
AKAR TARIM Ü., Ozmutlu E. N., YALÇIN S., GÜNDOĞDU Ö., Bradley D. A., GÜRLER O.  
RADIATION PHYSICS AND CHEMISTRY, vol.140, pp.403-405, 2017 (SCI-Expanded)
- VIII. **Monte Carlo Calculations for Photon Attenuation Studies on Different Solid Phantom Materials**  
Gundogdu O., Tarim Ü., Gurler O.  
ACTA PHYSICA POLONICA A, no.3, pp.1032-1035, 2017 (SCI-Expanded)
- IX. **Application of FLUKA code to gamma-ray attenuation, energy deposition and dose calculations**  
DEMİR N., Tarim Ü., Gurler O.  
INTERNATIONAL JOURNAL OF RADIATION RESEARCH, no.1, pp.123-128, 2017 (SCI-Expanded)
- X. **Determination of Radiation Shielding Properties of Some Polymer and Plastic Materials against Gamma-Rays**  
Gurler O., Tarim Ü.  
ACTA PHYSICA POLONICA A, no.1, pp.236-238, 2016 (SCI-Expanded)
- XI. **Evaluation of Multiple Backscattering and Saturation Thickness of Gamma Rays**  
Tarim Ü.  
ACTA PHYSICA POLONICA A, no.1, pp.233-235, 2016 (SCI-Expanded)
- XII. **INDOOR RADON LEVELS IN PRIMARY AND SECONDARY SCHOOLS OF KASTAMONU, TURKEY**

- Yalcin S., Aras G., Tarim Ü., Gurler O.  
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY, no.1, pp.18-22, 2015 (SCI-Expanded)
- XIII. **A possibility for standoff bomb detection**  
Tarim Ü., Ozmutlu E. N., Gurler O., Yalcin S.  
RADIATION PHYSICS AND CHEMISTRY, pp.170-174, 2015 (SCI-Expanded)
- XIV. **Monte Carlo calculations of the energy deposited in biological samples and shielding materials**  
Tarim Ü., Gurler O., Ozmutlu E. N., Yalcin S.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, no.3, pp.232-238, 2014 (SCI-Expanded)
- XV. **Calculation of gamma-ray mass attenuation coefficients of some Egyptian soil samples using Monte Carlo methods**  
Medhat M. E., DEMİR N., AKAR TARIM Ü., GÜRLER O.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.169, no.8, pp.706-714, 2014 (SCI-Expanded)
- XVI. **Investigation of mass attenuation coefficients of water, concrete and bakelite at different energies using the FLUKA Monte Carlo code**  
DEMİR N., AKAR TARIM Ü., Popovici M., Demirci Z. N., GÜRLER O., AKKURT İ.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.298, no.2, pp.1303-1307, 2013 (SCI-Expanded)
- XVII. **Monte Carlo calculations for gamma-ray mass attenuation coefficients of some soil samples**  
Tarim Ü., Gurler O., Ozmutlu E. N., Yalcin S.  
Annals of Nuclear Energy, vol.58, pp.198-201, 2013 (SCI-Expanded)
- XVIII. **Monte Carlo modelling of single and multiple Compton scattering profiles in a concrete material**  
Tarim Ü., Ozmutlu E. N., Gurler O., Yalcin S., Gundogdu O., Sharaf J. M., Bradley D. A.  
RADIATION PHYSICS AND CHEMISTRY, pp.12-17, 2013 (SCI-Expanded)
- XIX. **Monte Carlo analyses of multiple backscattering of gamma rays**  
Tarim Ü., Ozmutlu E. N., Gurler O., Yalcin S.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.295, no.2, pp.901-905, 2013 (SCI-Expanded)
- XX. **ESTIMATION OF MEAN (RN)-R-222 CONCENTRATION IN WATER AND IN INDOOR AIR OF KARACABEY, BURSA (TURKEY)**  
GÜRLER O., AKAR TARIM Ü., YALÇIN S.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.22, pp.247-251, 2013 (SCI-Expanded)
- XXI. **An investigation on determination of attenuation coefficients for gamma-rays by Monte Carlo method**  
Gurler O., Tarim Ü.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, no.1, pp.397-401, 2012 (SCI-Expanded)
- XXII. **The effect of the housing material on the NaI(Tl) detector response function**  
Tarim Ü., Ozmutlu E. N., Gurler O., Yalcin S.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, no.1, pp.425-429, 2012 (SCI-Expanded)
- XXIII. **The energy spectrum of 662 keV photons in a water equivalent phantom**  
Tarim Ü., Gurler O., Ozmutlu E. N., Yalcin S., Gundogdu O., Sharaf J. M., Bradley D. A.  
RADIATION PHYSICS AND CHEMISTRY, no.7, pp.745-748, 2012 (SCI-Expanded)
- XXIV. **Evaluation of radon concentration in well and tap waters in Bursa, Turkey**  
Tarim Ü., Gurler O., Akkaya G., Kilic N., Yalcin S., Kaynak G., Gundogdu O.  
RADIATION PROTECTION DOSIMETRY, no.2, pp.207-212, 2012 (SCI-Expanded)
- XXV. **MEASUREMENTS OF RADIUM LEVELS IN BOTTLED NATURAL SPRING WATER OF MARMARA REGION (TURKEY)**  
AKAR TARIM Ü., GÜRLER O., KAHRAMAN A., Yalcin S., Kaynak G., Gundogdu O.  
ROMANIAN JOURNAL OF PHYSICS, vol.57, pp.1204-1210, 2012 (SCI-Expanded)
- XXVI. **Analytical investigation of energy spectrums of beta rays emitted from <sup>90</sup>Sr and <sup>204</sup>Tl radioisotopes**  
Yalcin S., Gurler O., Gundogdu O., Akar Ü.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, no.3, pp.923-926, 2011 (SCI-Expanded)
- XXVII. **Measurements of radon concentration in drinking water samples from Kastamonu (Turkey)**

Yalcin S., GÜRLER O., AKAR TARIM Ü., Incirci F., Kaynak G., GÜNDOĞDU Ö.

ISOTOPES IN ENVIRONMENTAL AND HEALTH STUDIES, vol.47, no.4, pp.438-445, 2011 (SCI-Expanded)

XXVIII. **MEASUREMENTS OF RADON LEVELS IN THERMAL WATERS OF BURSA, TURKEY**

GÜRLER O., AKAR TARIM Ü., KAHRAMAN A., Yalcin S., Kaynak G., Gundogdu O.

FRESENIUS ENVIRONMENTAL BULLETIN, vol.19, pp.3013-3017, 2010 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Assessment of the Usability of a Composite Containing Boron Carbide for Shielding the Gamma Rays**  
Akar Tarım Ü.  
Sakarya University Journal of Science, vol.27, no.1, pp.159-167, 2023 (Peer-Reviewed Journal)
- II. **A Quick Method to Calculate NaI(Tl) Detector Efficiency Depending on Gamma ray Energy and Source-to-detector Distance**  
AKAR TARIM Ü., GÜRLER O., YALÇIN S.  
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.14, no.2, pp.195-199, 2018 (Peer-Reviewed Journal)
- III. **Application of Monte Carlo Method for Gamma ray Attenuation Properties of Lead Zinc Borate Glasses**  
AKAR TARIM Ü., GÜRLER O.  
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.22, no.6, pp.1848-1852, 2018 (Peer-Reviewed Journal)
- IV. **Source-to-detector Distance Dependence of Efficiency and Energy Resolution of a 3"x3" NaI(Tl) Detector**  
AKAR TARIM Ü., GÜRLER O.  
Avrupa Bilim ve Teknoloji Dergisi, vol.0, no.13, pp.103-107, 2018 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **INVESTIGATION OF THE EFFICIENCY OF POLYMER AND METAL MATRIX COMPOSITES AS GAMMA RAY SHIELDING MATERIAL**  
YURTTADUR PERÇİN B., AKAR TARIM Ü.  
INTERNATIONAL CONGRESS OF NEW HORIZONS IN SCIENCES (INCOHIS 2023 SPRING), İstanbul, Turkey, 20 May 2023
- II. **Determination of Gamma-ray Attenuation Properties of Bursa Marbles**  
Hijazi O. T., Gürler O., Akar Tarım Ü.  
4. INTERNATIONAL SCIENTIFIC RESEARCH AND INNOVATION CONGRESS , İstanbul, Turkey, 24 - 25 December 2022, pp.265-266
- III. **Toprak Ortamında Çoklu Saçılan Gamma Işınlının Şiddetinin Ortam Boyutlarına Bağlı Değişimi**  
AKAR TARIM Ü., GÜRLER O.  
4. Uluslararası Bilimsel Araştırmalar Kongresi, Yalova, Turkey, 14 - 17 February 2019
- IV. **NaI(Tl) Dedektörünün Cevap Fonksiyonunun Analitik Olarak İncelenmesi**  
AKAR TARIM Ü.  
1. Uluslararası Battalgazi Multidisipliner Çalışmalar Kongresi, Malatya, Turkey, 7 - 09 December 2018
- V. **KAYNAK-DETEKTÖR ARASİMESAFENİN NaI(Tl) DETEKTÖRÜNÜN VERİMİNE ETKİSİ**  
AKAR TARIM Ü., GÜRLER O., YALÇIN S.  
Adım Fizik Günleri VI, 19 - 21 July 2017
- VI. **Monte Carlo Simulations Using Two Different Approaches for Sampling of Emitting Point of gamma radiations to Calculate the Efficiency of Cylindrical NaI(Tl) Detector for Disk Sources**  
AKAR TARIM Ü., YALÇIN S., GÜRLER O.  
4th International Conference on Computational and Experimental Science and Engineering (ICCESEN 2017), 4 - 08 October 2017

- VII. **Monte Carlo calculations for photon attenuation studies on different solid phantom materials / (Bu bildiri metni daha sonra makale olarak yayımlanmıştır.)**  
GÜNDOĞDU Ö., AKAR TARIM Ü., GÜRLER O.  
3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN2016),  
Antalya, Turkey, 19 - 24 October 2016
- VIII. **Monte Carlo calculations for photon attenuation studies on different solid phantom materials**  
GÜNDOĞDU Ö., AKAR TARIM Ü., GÜRLER O.  
3rd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2016), 19 -  
24 October 2016
- IX. **Determination of radiation shielding properties of some polymer and plastic materials for gamma rays / (Bu bildiri metni daha sonra makale olarak yayımlanmıştır.)**  
GÜRLER O., AKAR TARIM Ü.  
2nd International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 14 -  
19 October 2015
- X. **Determination of radiation shielding properties of some polymer and plastic materials for gamma rays**  
GÜRLER O., AKAR TARIM Ü.  
2nd International Conference on Computational and Experimental Science and Engineering (ICCESEN 2015),  
Antalya, Turkey, 14 - 19 October 2015
- XI. **Evaluation of multiple backscattering and saturation thickness of gamma rays / (Bu bildiri metni daha sonra makale olarak yayımlanmıştır.)**  
AKAR TARIM Ü.  
2nd International Conference on Computational and Experimental Science and Engineering, Antalya, Turkey, 14 -  
19 October 2015
- XII. **Development of a Monte Carlo code for the gamma-ray attenuation studies of bismuth borate glass systems**  
AKAR TARIM Ü., GÜRLER O., YALÇIN S., ÖZMUTLU E. N.  
4th International Advances in Applied Physics and Materials Science Congress and Exhibition, Fethiye, MUĞLA,  
Turkey, 24 - 27 April 2014
- XIII. **Measurements of Radon Levels in Bottled Natural Spring Water of Turkey**  
AKAR TARIM Ü., GÜRLER O., KAHRAMAN A., YALÇIN S., KAYNAK Z. G., GÜNDOĞDU Ö.  
10 th International Balkan Workshop on Applied Physics, 6 - 08 July 2009
- XIV. **Measurements of radon levels in bottled natural spring water of Turkey / (Bildiri metni daha sonra makale olarak yayımlanmıştır.)**  
AKAR TARIM Ü., GÜRLER O., KAHRAMAN A., YALÇIN S., KAYNAK Z. G., GÜNDOĞDU Ö.  
10th International Balkan Workshop on Applied Physics, Constanta, Romania, 6 - 08 July 2009

## Patent

Gürler O., Çavaş T., Akar Tarım Ü., Çinkılıç N., Vatan Ö., Akca Ç., Ayas E., Huriyet H., Gergin B., Arıkan H. S., RADYASYONA KARŞI HAFİF, EKONOMİK ZİRH: ALFA-SEPİYOLİT (LÜLETAŞI), Patent, CHAPTER G Physics, The Invention Registration Number: 2016/01282 , Standard Registration, 2019

## Metrics

Publication: 46

Citation (WoS): 335

Citation (Scopus): 534

H-Index (WoS): 10

H-Index (Scopus): 11

## **Non Academic Experience**

Milli Eğitim