

## Assoc. Prof. GİZEM AKKAYA

### Personal Information

**Email:** gizemd@uludag.edu.tr

**Web:** <https://avesis.uludag.edu.tr/gizemd>

### International Researcher IDs

ScholarID: cMasWZkAAAAJ

ORCID: 0000-0002-6573-2101

Publons / Web Of Science ResearcherID: AAH-8784-2021

ScopusID: 18036694200

Yoksis Researcher ID: 199994

### Education Information

Doctorate, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, Fizik Bölümü, Turkey 2001 - 2011

Postgraduate, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, Fizik Bölümü, Turkey 1998 - 2001

Undergraduate, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, Fizik Bölümü, Turkey 1994 - 1998

### Foreign Languages

English, B2 Upper Intermediate

### Research Areas

Natural Sciences

### Academic Titles / Tasks

Research Assistant PhD, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 1998 - Continues

### Courses

TEMEL FİZİK II, Undergraduate, 2018 - 2019

FİZİK, Associate Degree, 2017 - 2018

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

- I. **The calculation of self-shielding correction factors for large samples in  $^{241}\text{Am}$ -Be isotopic neutron source**  
Akkaya G.  
Applied Radiation and Isotopes, vol.179, 2022 (SCI-Expanded)
- II. **CORRIGENDUM TO: ESTIMATION OF RADIOLOGICAL EXPOSURE LEVELS IN A MINING AREA BASED**

**ON 238U, 226RA, 232TH AND 40K ACTIVITY MEASUREMENTS: A CASE STUDY FOR BEYLIKOVA-SIVRIHISAR COMPLEX ORE SITE IN TURKEY**

Yücel H., Övüç S., AKKAYA G., ÇAKMAK Ş.

RADIATION PROTECTION DOSIMETRY, vol.192, no.4, pp.530, 2020 (SCI-Expanded)

- III. **Neutron self-shielding correction in application of k(0)-NAA standardization method to determine Mn content in manganese ores**  
Akkaya G., Yücel H., Budak M. G.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.475, pp.1-7, 2020 (SCI-Expanded)
- IV. **ESTIMATION OF RADIOLOGICAL EXPOSURE LEVELS IN A MINING AREA BASED ON U-238, Ra-226, Th-232 and K-40 ACTIVITY MEASUREMENTS: A CASE STUDY FOR BEYLIKOVA-SIVRIHISAR COMPLEX ORE SITE IN TURKEY**  
Yücel H., Ovuc S., Akkaya G., Cakmak S.  
RADIATION PROTECTION DOSIMETRY, vol.190, no.3, pp.297-306, 2020 (SCI-Expanded)
- V. **The Investigation of Radionuclide Concentrations in Soil and Lifetime Cancer Risk Due to Gamma Radioactivity in Zonguldak, Turkey**  
Koray A., Akkaya G., Kahraman A., Kaynak G., Baldik R.  
ACTA PHYSICA POLONICA A, vol.132, no.3, pp.1122-1125, 2017 (SCI-Expanded)
- VI. **Variation in the radon concentrations and outdoor gamma radiation levels in relation to different geological formations in the thermal regions of Bursa, Turkey**  
AKKAYA G., KAHRAMAN A., Koray A., Kaynak G.  
JOURNAL OF RADIOLOGICAL PROTECTION, vol.36, no.3, pp.490-503, 2016 (SCI-Expanded)
- VII. **MEASUREMENTS OF RADON CONCENTRATIONS IN WATERS AND SOIL GAS OF ZONGULDAK, TURKEY**  
Koray A., AKKAYA G., KAHRAMAN A., Kaynak G.  
RADIATION PROTECTION DOSIMETRY, vol.162, no.3, pp.375-381, 2014 (SCI-Expanded)
- VIII. **Radioactivity measurements in epiphytic lichens of Uludag Mountain in Western Anatolia**  
Kahraman A., Kaynak G., Akkaya G., Gürler O., Yalcun S.  
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.295, no.2, pp.1057-1066, 2013 (SCI-Expanded)
- IX. **The investigation of radionuclide distributions in soil samples collected from Bursa, Turkey**  
Akkaya G., Kaynak G., Kahraman A., Gurler O.  
RADIATION PROTECTION DOSIMETRY, vol.152, no.4, pp.376-383, 2012 (SCI-Expanded)
- X. **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)

## Articles Published in Other Journals

- I. **A Thoron Anomaly in the Soil Gas: A Case Study From Büyükorhan, Bursa, Turkey**  
Akkaya G.  
Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.24, no.70, pp.157-164, 2022 (Peer-Reviewed Journal)
- II. **Determination of Manganese Content in Some Commercial Manganese Ores in Turkey k0-NAA Standardization Method Using 241Am-Be Isotopic Neutron Source**  
Akkaya G., Yücel H., Budak M. G.  
AIP CONFERENCE PROCEEDINGS, vol.2075, no.070005, pp.1-4, 2019 (Peer-Reviewed Journal)
- III. **Radon Concentration Measurements and Risk Assessments Around Uludağ Mountain (Bursa, Turkey)**  
Kahraman A., Akkaya G., Kaynak Z. G.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.21, no.3, pp.797-807, 2017 (Peer-Reviewed Journal)
- IV. **Correlation of Radon and Thoron Concentrations with Natural Radioactivity of Soil in Zonguldak,**

## **Turkey**

Akkaya G., Koray A., Kahraman A.

AIP CONFERENCE PROCEEDINGS, vol.1815, no.060015, pp.1-4, 2017 (Scopus)

### **V. Mosses beta radioactivity in Katirli mountain-Bursa, Turkey**

Kahraman A., Kaynak Z. G., Akkaya G., Gültekin A., Gürler O., Yalçın S.

AIP Conference Proceedings, vol.899, pp.737, 2007 (Peer-Reviewed Journal)

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

- I. **Beylikova Kompleks Cevher Sahasından Elde Edilen Numunelerde Radyoaktivite İçeriğinin Belirlenmesi ve NTE Madenciliğinde Olası Doz Seviyelerinin Tahmini**  
YÜCEL H., ÖVÜÇ S., AKKAYA G., ÇAKMAK Ş.  
1. Nadir Toprak Elementleri ve Toryum Çalıştayı, Eskişehir, Turkey, 11 - 12 June 2019
- II. **Determination of Manganese Content in Some Commercial Manganese Ores in Turkey k(0)-NAA Standardization Method Using Am-241-Be Isotopic Neutron**  
Akkaya G., Yücel H., Budak M. G.  
10th Jubilee Conference of the Balkan-Physical-Union (BPU), Sofija, Bulgaria, 26 - 30 August 2018, vol.2075
- III. **Correlation of Radon and Thoron Concentrations with Natural Radioactivity of Soil in Zonguldak, Turkey**  
Koray A., AKKAYA G., KAHRAMAN A.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- IV. **Uludağ in bazı bölgelerindeki musluk ve yeraltı sularında yaz mevsimi radon gazı seviyelerinin jeolojik yapıya bağlı olarak incelenmesi**  
KAHRAMAN A., AKKAYA G., KAYNAK Z. G.  
3. Uluslararası su kongresi ve sergisi, 22 - 24 March 2013
- V. **Uludağ in Bazı Bölgelerindeki Musluk ve Yeraltı Sularında Yaz Mevsimi Radon Gazı Seviyelerinin Jeolojik Yapıya Bağlı Olarak İncelenmesi**  
KAHRAMAN A., AKKAYA G., KAYNAK Z. G.  
3. Uluslararası Bursa Su Kongresi ve Sergisi, Bursa, Turkey, 22 - 24 March 2013
- VI. **Büyükorhan Bursa Doğal Kaynak Sularının Yaz Mevsimi Radon Konsantrasyonlarının ve Doz Değerlerinin Araştırılması**  
AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
3. Uluslararası Bursa Su Kongresi ve Sergisi, Bursa, Turkey, 22 - 24 March 2013
- VII. **Measurements of Radon Concentrations in Waters of Zonguldak Turkey**  
KORAY A., AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
3. Uluslararası Bursa Su Kongresi ve Sergisi, Bursa, Turkey, 22 - 24 March 2013
- VIII. **RADON CONCENTRATIONS IN THERMAL WATERS IN BURSA PROVINCE AND THE ASSOCIATED HEALTH EFFECTS**  
AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, 5 - 08 September 2012
- IX. **ASSESSMENT OF GAMMA DOSE RATES IN BÜYÜKORHAN BURSA**  
AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, 5 - 08 September 2012
- X. **EVALUATION OF RADON CONCENTRATION IN GROUNDWATER DURING SPRING SEASON IN BÜYÜKORHAN TOWNSHIP OF BURSA PROVINCE**  
AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, 5 - 08 September 2012
- XI. **Evaluation of radon concentration in groundwater during spring season in Büyükorhan township of Bursa province**

- AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, Bodrum, Turkey, 5 - 08 September 2012
- XII. **Assesment of Gamma Dose Rates in Büyükorhan Bursa**  
AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, 5 - 08 September 2012
- XIII. **Radon Concentrations in Thermal Waters in Bursa Province and The Associated Health Effects**  
AKKAYA G., KAHRAMAN A., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, 5 - 08 September 2012
- XIV. **Measurement of the radon concentrations in drinking water in Uludag during spring season**  
KAHRAMAN A., AKKAYA G., KAYNAK Z. G.  
Turkish Phycsis Society 29 th International Physics Congress, Bodrum, Turkey, 5 - 08 September 2012
- XV. **Assesment of Gamma Dose Rate Levels in Uludag Mountain**  
KAHRAMAN A., AKKAYA G., KAYNAK Z. G.  
Turkish Physical Society 29th International Physics Congress, 5 - 08 September 2012
- XVI. **Radiocarbon dating with low background counting system**  
AKKAYA G., KAYNAK Z. G., GÜRLER O., YALÇIN S.  
10th International Balkan Workshop on Applied Physics, 6 - 08 July 2009
- XVII. **An analytical solution for calculation of nucleons energy levels**  
AKKAYA G., KAYNAK Z. G., GÜRLER O., YALÇIN S.  
10th International Balkan Workshop on Applied Physics, 6 - 08 July 2009
- XVIII. **Application of Decomposition Techniques to measured spectra of  $^{137}\text{Cs}$**   
AKKAYA G., KAHRAMAN A., KAYNAK Z. G., GÜRLER O., YALÇIN S.  
10 th International Balkan Workshop on Applied Physics, Constanta, Romania, 6 - 08 July 2009
- XIX. **Mosses beta radioactivity in Katirh mountain Bursa TURKEY**  
KAHRAMAN A., KAYNAK Z. G., AKKAYA G., GÜLTEKİN A., GÜRLER O., YALÇIN S.  
CP899, Sixth International Conference of the Balkan Physical Union, 01 April 2007
- XX. **Çekirdek enerji seviyelerinin çeşitli potansiyel kuyuları için incelenmesi**  
AKKAYA G., KAYNAK Z. G.  
TFD-2000 Türk Fizik Derneği 19. Fizik Kongresi, Turkey, 26 - 29 September 2000

## Supported Projects

Akkaya G., Yücel H., TUBITAK Project, "241Am-Be nötron kaynağı kullanarak  $^{55}\text{Mn}(n, \gamma)^{56}\text{Mn}$  tepkimesi yardımıyla manganez cevherlerinin k $\alpha$ -NAA yöntemiyle incelenmesi ve silikon drift dedektörlü ED-XRF yöntemiyle karşılaştırılması, 2018 - 2019

Akkaya G., Kaynak G., Kahraman A., Project Supported by Higher Education Institutions, Bursa ili toprak numunelerinde radyonüklid dağılımının incelenmesi, 2010 - 2011

## Metrics

Publication: 35

Citation (WoS): 87

Citation (Scopus): 87

H-Index (WoS): 5

H-Index (Scopus): 5