

## Assoc. Prof. UFUK PERİŞANOĞLU

### Personal Information

**Email:** ufukperisanoglu@hakkari.edu.tr

**Web:** <https://avesis.hakkari.edu.tr/ufukperisanoglu>

### International Researcher IDs

ScholarID: OZEhdo8AAAAJ

ORCID: 0000-0003-4110-2241

Publons / Web Of Science ResearcherID: KXS-2046-2024

ScopusID: 56507421000

Yoksis Researcher ID: 247918

### Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Nanomalzemeler (Dr), Turkey 2015 - 2023

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Atom Ve Moleküler Fiziği (Dr), Turkey 2014 - 2018

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Atom Ve Molekül Fiziği (YI) (Tezli), Turkey 2010 - 2014

Undergraduate, Ataturk University, Fen Fakültesi, Fizik Bölümü, Turkey 2005 - 2009

### Dissertations

Doctorate, Geçiş metal dikalkojenitlerin süperkapasitör aygıtlarda elektrot olarak kullanılması, Ataturk University, Fen Bilimleri Enstitüsü, Nanomalzemeler (Dr), 2023

Doctorate, Geçiş metali nano ferrit alaşımlar için K X-ışını şiddet oranı üzerine kimyasal etkilerin incelenmesi ve bu alaşımların radyasyon soğurma kabiliyetlerinin değerlendirilmesi, Ataturk University, Fen Bilimleri Enstitüsü, Atom Ve Moleküler Fiziği (Dr), 2018

Postgraduate, Dış manyetik alanda bazı geçiş metal alaşımlarının K tabakası X-ışını şiddet oranlarının belirlenmesi ve bu alaşımlar için etkin atom numaralarının tayini, Ataturk University, Fen Bilimleri Enstitüsü, Atom Ve Molekül Fiziği (YI) (Tezli), 2014

### Research Areas

Nanotechnology, Material science and engineering, Nanomaterials, Physics, Atomic and Molecular Physics, Interdisciplinary Physics and Related Science and Technology Areas

### Academic Titles / Tasks

Associate Professor, Hakkari University, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği, 2025 - Continues

Lecturer PhD, Hakkari University, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği, 2016 - Continues

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

1. Advanced flexible supercapacitors: vertical 2D MoS<sub>2</sub> and WS<sub>2</sub>

**nanowalls on graphenated carbon nanotube cotton**

Perisanoglu U., Perisanoglu E., Kudas Z., Ekinci D., Ismail I., Gür E.  
NANOSCALE, vol.17, no.11, pp.6704-6717, 2025 (SCI-Expanded)

- II. **Er<sub>2</sub>O<sub>3</sub>-Doped Lead Borate Glasses: Advanced Optical and Radiation Shielding Performance**  
Abouhaswa A., PERİŞANOĞLU U., Saltik S., Ekinci N., Nasr M., Kalecik S., Perisanoglu E.  
JOURNAL OF INORGANIC AND ORGANOMETALLIC POLYMERS AND MATERIALS, 2025 (SCI-Expanded)
- III. **Improved physical, optical, and radiation shielding characteristics of SrO-doped borate glasses: Insights from experiments and machine learning**  
Eskalen H., Kavgacı M., Yaykaşlı H., Özğan Ş., Gök M., Perişanoğlu U., Perişanoğlu E. K.  
Ceramics International, 2025 (SCI-Expanded)
- IV. **Impact of neodymium oxide (Nd<sub>2</sub>O<sub>3</sub>) substitution in barium–boron-phosphate glasses: A pathway to superior mechanical, optical, and radiation shielding performance**  
Abouhaswa A., Perişanoğlu U., Araz A., Ahmadi N., Urtekin E., Kavaz Perişanoğlu E.  
Ceramics International, vol.50, no.17, pp.29459-29467, 2024 (SCI-Expanded)
- V. **Synthesis, structural, optical and experimental gamma-ray shielding properties of molybdenum-trioxide reinforced CRT glasses**  
Kurtulus R., KAVAZ E., Kavaz T., ALMisned G., PERİŞANOĞLU U., Tekin H.  
Journal of the Australian Ceramic Society, vol.60, no.4, pp.1103-1119, 2024 (SCI-Expanded)
- VI. **Analysis of structural, optical, mechanical properties and evaluation of radiation shielding effectiveness of strontium borate glasses doped with ZnO nanoparticles**  
Kavgacı M., Yaykaşlı H., Eskalen H., Perişanoğlu U., Yılmaz R., Tunç H., Perişanoğlu E. K.  
Ceramics International, vol.50, no.14, pp.25256-25272, 2024 (SCI-Expanded)
- VII. **Investigation of coherent/Compton scattering differential cross section ratios in Cu alloys as depending on chemical environment and scattering angle**  
Urtekin E., KAVAZ E., PERİŞANOĞLU U., DEMİR L.  
Applied Radiation and Isotopes, vol.190, 2022 (SCI-Expanded)
- VIII. **SrO Effect on Photon/Particle Radiation Protection Characteristics of SrO–PbO–B<sub>2</sub>O<sub>3</sub> Glasses**  
Al-Buriah M., KAVAZ E., PERİŞANOĞLU U., Alalawi A., ÇAKICI T., Alomairy S., Rammah Y.  
Journal of Inorganic and Organometallic Polymers and Materials, vol.31, no.12, pp.4546-4562, 2021 (SCI-Expanded)
- IX. **New shielding ZnO-PbO-TeO<sub>2</sub> glasses**  
El-Mallawany R., KAVAZ E., PERİŞANOĞLU U., Tekin H., Alazoumi S., Umar S., El-Agawany F., Rammah Y.  
Optik, vol.243, 2021 (SCI-Expanded)
- X. **Optical and nuclear radiation protection characteristics of lithium bismo-borate glasses: Role of ZrO<sub>2</sub> substitution**  
Abouhaswa A., Tekin H., KAVAZ E., PERİŞANOĞLU U.  
Radiation Physics and Chemistry, vol.183, 2021 (SCI-Expanded)
- XI. **Multiple characterization of some glassy-alloys as photon and neutron shields: In-silico Monte Carlo investigation**  
PERİŞANOĞLU U., El-Agawany F., Tekin H., KAVAZ E., Zakaly H. M., Issa S. A., Zaid M., Sidek H., Matori K., Rammah Y.  
Materials Research Express, vol.8, no.3, 2021 (SCI-Expanded)
- XII. **Structural and nuclear shielding qualities of B<sub>2</sub>O<sub>3</sub>–PbO–Li<sub>2</sub>O glass system with different Ag<sub>2</sub>O substitution ratios**  
PERİŞANOĞLU U., Tekin H., Abouhaswa A., KAVAZ E.  
Radiation Physics and Chemistry, vol.179, 2021 (SCI-Expanded)
- XIII. **Nuclear shielding properties of B<sub>2</sub>O<sub>3</sub>–Pb<sub>3</sub>O<sub>4</sub>–ZnO glasses: Multiple impacts of Er<sub>2</sub>O<sub>3</sub> additive**  
Abouhaswa A., PERİŞANOĞLU U., Tekin H., KAVAZ E., Henaish A.  
Ceramics International, vol.46, no.17, pp.27849-27859, 2020 (SCI-Expanded)
- XIV. **Charged particles and gamma-ray shielding features of oxyfluoride semiconducting glasses: TeO<sub>2</sub>-Ta<sub>2</sub>O<sub>5</sub>-ZnO/ZnF<sub>2</sub>**

- Rammah Y, KAVAZ E, PERİŞANOĞLU U, KILIÇ G, El-Agawany F, Tekin H.  
Ceramics International, vol.46, no.16, pp.25035-25042, 2020 (SCI-Expanded)
- XV. **The impact of Gd<sub>2</sub>O<sub>3</sub> on nuclear safety proficiencies of TeO<sub>2</sub>-ZnO-Nb<sub>2</sub>O<sub>5</sub> glasses: A GEANT4 Monte Carlo study**  
Al-Buriah M, Tonguç B, PERİŞANOĞLU U, KAVAZ E.  
Ceramics International, vol.46, no.15, pp.23347-23356, 2020 (SCI-Expanded)
- XVI. **Nuclear radiation shielding using barium borosilicate glass ceramics**  
KAVAZ E, El-Agawany F, Tekin H, PERİŞANOĞLU U, Rammah Y.  
Journal of Physics and Chemistry of Solids, vol.142, 2020 (SCI-Expanded)
- XVII. **Comparison of gamma and neutron shielding competences of Fe-Cu- and brass-added Portland cement pastes: an experimental and Monte Carlo study**  
PERİŞANOĞLU U, KAVAZ E, Tekin H, Armoosh S, EKİNCİ N, OLTULU M.  
Applied Physics A: Materials Science and Processing, vol.126, no.6, 2020 (SCI-Expanded)
- XVIII. **Investigating photon interaction characteristics of Fe<sub>x</sub>Ni<sub>1-x</sub> alloys**  
Urtekin E, PERİŞANOĞLU U, DEMİR L, ÖZTÜRK A.  
Materials Chemistry and Physics, vol.242, 2020 (SCI-Expanded)
- XIX. **Surveying of Na<sub>2</sub>O<sub>3</sub>-BaO-PbO-Nb<sub>2</sub>O<sub>5</sub>-SiO<sub>2</sub>-Al<sub>2</sub>O<sub>3</sub> glass-ceramics system in terms of alpha, proton, neutron and gamma protection features by utilizing GEANT4 simulation codes**  
PERİŞANOĞLU U, El-Agawany F, KAVAZ E, Al-Buriah M, Rammah Y.  
Ceramics International, vol.46, no.3, pp.3190-3202, 2020 (SCI-Expanded)
- XX. **Examining alloying effect on K X ray intensity ratios and chemical shifts of the Zn, Mn and mixed spinel ferrites**  
PERİŞANOĞLU U, KAVAZ E, Urtekin E, DEMİR L.  
Applied Radiation and Isotopes, vol.156, 2020 (SCI-Expanded)
- XXI. **Gamma ray shielding effectiveness of the Portland cement pastes doped with brass-copper: An experimental study**  
KAVAZ E, Armoosh S, PERİŞANOĞLU U, Ahmadi N, OLTULU M.  
Radiation Physics and Chemistry, vol.166, 2020 (SCI-Expanded)
- XXII. **Sm<sub>2</sub>O<sub>3</sub> effects on mass stopping power/projected range and nuclear shielding characteristics of TeO<sub>2</sub>-ZnO glass systems**  
El-Agawany F, KAVAZ E, PERİŞANOĞLU U, Al-Buriah M, Rammah Y.  
Applied Physics A: Materials Science and Processing, vol.125, no.12, 2019 (SCI-Expanded)
- XXIII. **Assessment of nuclear shielding and alpha/proton mass stopping power properties of various metallic glasses**  
PERİŞANOĞLU U.  
Applied Physics A: Materials Science and Processing, vol.125, no.11, 2019 (SCI-Expanded)
- XXIV. **Estimation of gamma radiation shielding qualification of newly developed glasses by using WinXCOM and MCNPX code**  
KAVAZ E, EKİNCİ N, Tekin H, Sayyed M, Aygün B, PERİŞANOĞLU U.  
Progress in Nuclear Energy, vol.115, pp.12-20, 2019 (SCI-Expanded)
- XXV. **Gamma ray shielding capabilities of rhenium-based superalloys**  
EKİNCİ N, KAVAZ E, Aygün B, PERİŞANOĞLU U.  
Radiation Effects and Defects in Solids, vol.174, no.5-6, pp.435-451, 2019 (SCI-Expanded)
- XXVI. **Investigating XRF parameters and valance electronic structure of the Co, Ni, and Cu spinel ferrites**  
DEMİR L, PERİŞANOĞLU U, ŞAHİN M.  
Ceramics International, vol.45, no.6, pp.7748-7753, 2019 (SCI-Expanded)
- XXVII. **Effect of external magnetic field on the K $\beta$ /K $\alpha$  X-ray intensity ratios of Ti<sub>x</sub>Ni<sub>1-x</sub> alloys excited by 59.54 and 22.69 keV photons**  
PERİŞANOĞLU U, Alım B, Uğurlu M, DEMİR L.  
Applied Radiation and Isotopes, vol.115, pp.183-189, 2016 (SCI-Expanded)
- XXVIII. **Determination of energy absorption and exposure buildup factors by using G-P fitting**

### **approximation for radioprotective agents**

KAVAZ E., PERİŞANOĞLU U., EKİNCİ N., ÖZDEMİR Y.

International Journal of Radiation Biology, vol.92, no.7, pp.380-387, 2016 (SCI-Expanded)

### **XXIX. A study of K shell X-ray intensity ratios of NixCr1-x alloys in external magnetic field and determination of effective atomic numbers of these alloys**

PERİŞANOĞLU U., DEMİR L.

Radiation Physics and Chemistry, vol.110, pp.119-125, 2015 (SCI-Expanded)

## **Articles Published in Other Journals**

### **I. Gamma Radiation Shielding Efficiency of High Entropy Alloys: A Comparative Study**

Perişanoğlu U.

Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, no.Ağustos, pp.1-12, 2024 (Peer-Reviewed Journal)

## **Books**

### **I. Radiation Shielding Characteristics of Bulk Amorphous Metals for Gamma Rays, Charged and Uncharged Particles**

Perişanoğlu U.

in: Computational Methods in Nuclear Radiation Shielding and Dosimetry, Kulwinder Singh Mann, V. P. Singh, Editor, NOVA Science Publishers Inc., New York, pp.1-20, 2020

### **II. Characterization of Gamma Photon Shielding Features of Cerium Doped Zirconite Glass-Ceramics**

Kavaz E., Perişanoğlu U.

in: A Closer Look at Gamma Rays, V. P. Singh, Kulwinder Singh Mann, Editor, NOVA Science Publishers Inc., New York, pp.1-20, 2020

## **Papers Published in Refereed Scientific Meetings**

### **I. IMPACT OF GAMMA RADIATION ON THE PERFORMANCE OF TRANSITION METAL DICHALCOGENIDE-BASED SUPERCAPACITOR ELECTRODES**

KAVAZ PERİŞANOĞLU E., PERİŞANOĞLU U., Aydemir Ö. F., GÜNDOĞMUŞ H.

TÜRK FİZİK DERNEĞİ 40. ULUSLARARASI FİZİK KONGRESİ, Turkey, 2 - 06 September 2024

### **II. A study on gamma ray shielding properties of PrSm1 xBO3 compounds**

GÜNDOĞMUŞ H., PERİŞANOĞLU U., KAVAZ E.

TFD 32nd International Physics Congress, 6 - 09 September 2016

### **III. INVESTIGATION ON PHOTON INTERACTION PARAMETERS OF SOME INORGANIC THIN FILMS**

KAVAZ E., PERİŞANOĞLU U., EKİNCİ N., ÖZDEMİR Y.

TFD 32nd International Physics Congress, 6 - 09 September 2016

## **Supported Projects**

Kavaz E., Perişanoğlu U., Gür E., Dağcı Kıranşan K., Project Supported by Higher Education Institutions, 2024 - 2026

Gür E., Perişanoğlu U., TÜBİTAK International Bilateral Joint Cooperation Program Project, 2B Inse, Gase Ve Mos2

Katmanli Yapıların Grafine Edilmiş Knt-Pamuk Üzerine Saçtırma İle Büyütülmesi Ve/Veya Yüklenmesi İle Oluşturulan Kompozit Süperkapasitör Aygıtlar, 2024 - 2026

Kavaz Perişanoğlu E., Perişanoğlu U., TUBITAK Project, Geçiş Metal Diselenidli Esnek Süperkapasitör Elektrotların

Üretimi/Karakterizasyonu Ve Süperkapasitör Aygıt Tasarımı, 2023 - 2025

TUBITAK Project, Growth of Platinum Group 2b Dichalcogens by Ms-Cvd Technique and Photodetector Fabrication and

Testing, 2022 - 2024

## **Patent**

Periřanođlu U., ESNEK YÜKSEK PERFORMANSLI CARBONCOTTONMOS2 VE CARBONCOTTONWS2 TABANLI SÜPERKAPASİTÖR ÜRETİMİ, Patent, CHAPTER G Physics, The Invention Recourse Number: 2023/002255 , Standard Registration, 2023

## **Metrics**

Publication: 35

Citation (Scopus): 847

H-Index (Scopus): 15