

Assoc. Prof. Nergiz Yıldız Yorgun

Personal Information

Office Phone: [+90 444 5 065](tel:+904445065) Extension: 37

Office Phone: [+90 432 444 5065](tel:+904324445065) Extension: 27837

Email: nyildiz@yyu.edu.tr

Web: <https://avesis.yyu.edu.tr/nyildiz>

Education Information

Doctorate, Ege University, Nükleer Bilimler Enstitüsü, Nükleer Fizik, Turkey 2005 - 2010

Research Areas

Physics, Nuclear physics, Radioactive decay and in-beam spectroscopy, Natural Sciences

Academic Titles / Tasks

Associate Professor, Van Yüzüncü Yil University, Fen Fakültesi, Fizik Bölümü, 2020 - Continues

Assistant Professor, Van Yüzüncü Yil University, Fen Fakültesi, Fizik Bölümü, 2011 - 2020

Research Assistant, Van Yüzüncü Yil University, Fen Fakültesi, Fizik Bölümü, 2002 - 2011

Academic and Administrative Experience

Van Yüzüncü Yil University, Fen Fakültesi, Fizik, 2016 - Continues

Advising Theses

Yıldız N., Fisyon Reaktörlerinde Nötron Zehiri İzotopların Tesir Kesiti Hesaplamaları, Postgraduate, R.KARTAL(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Development of SiO₂ based doped with LiF, Cr₂O₃, CoO₄ and B₂O₃ glasses for gamma and fast neutron shielding**
AYGÜN B., ŞAKAR E., KARABULUT A., ALIM B., Sayyed M., Singh V. P., Yıldız Yorgun N., ÖZPOLAT Ö. F.
RADIOCHIMICA ACTA, vol.109, no.2, pp.143-151, 2021 (Journal Indexed in SCI)
- II. **Iron (III) oxide doped lithium borate glasses: structural and charged particles/photon shielding properties**
KARA Ü., Susoy G., Issa S. A., Elshami W., Yorgun N., Abuzaid M., KAVAZ E., Tekin H.
Journal of Non-Crystalline Solids, vol.546, 2020 (Journal Indexed in SCI)
- III. **Development and production of metal oxide doped glasses for gamma ray and fast neutron shielding**
Aygün B., ŞAKAR E., CİNAN E., Yorgun N., Sayyed M., Agar O., KARABULUT A.

RADIATION PHYSICS AND CHEMISTRY, vol.174, 2020 (Journal Indexed in SCI)

- IV. **Optical, structural and gamma ray shielding properties of dolomite doped lithium borate glasses for radiation shielding applications**
KARA Ü., Issa S. A. M. , Yorgun N., Kilicoglu O., Rashad M., Abuzaid M. M. , KAVAZ E., Tekin H. O.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.539, 2020 (Journal Indexed in SCI)
- V. **Scanning electron microscopy (SEM), energy-dispersive X-ray (EDX) spectroscopy and nuclear radiation shielding properties of [alpha-Fe₃+O(OH)]-doped lithium borate glasses**
KARA Ü., Susoy G., Issa S. A. M. , Elshami W., Yorgun N., Abuzaid M. M. , KAVAZ E., Tekin H. O.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.126, no.7, 2020 (Journal Indexed in SCI)
- VI. **Optical, structural and nuclear radiation shielding properties of Li₂B₄O₇ glasses: effect of boron mineral additive**
KARA Ü., Kavaz E., Issa S. A. M. , Rashad M., Susoy G., Mostafa A. M. A. , Yorgun N., Tekin H. O.
Applied Physics A: Materials Science and Processing, vol.126, no.4, 2020 (Journal Indexed in SCI Expanded)
- VII. **Synergistic effect of serpentine mineral on Li₂B₄O₇ glasses: optical, structural and nuclear radiation shielding properties**
KARA Ü., Issa S. A. M. , Susoy G., Rashad M., Kavaz E., Yorgun N., Tekin H. O.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.126, no.3, 2020 (Journal Indexed in SCI)
- VIII. **Borax effect on gamma and neutron shielding features of lithium borate glasses: an experimental and Monte Carlo studies**
Yorgun N., KAVAZ E., Tekin H. O. , SAYYED M., Özdemir Ö. F.
MATERIALS RESEARCH EXPRESS, vol.6, no.11, 2019 (Journal Indexed in SCI)
- IX. **Structural and nuclear radiation shielding properties of bauxite ore doped lithium borate glasses: Experimental and Monte Carlo study**
KAVAZ E., Tekin H. O. , Yorgun N., Özdemir Ö. F. , SAYYED M. I.
RADIATION PHYSICS AND CHEMISTRY, vol.162, pp.187-193, 2019 (Journal Indexed in SCI)
- X. **Gamma-ray shielding parameters of Li₂B₄O₇ glasses: undoped and doped with magnetite, siderite and Zinc-Borate minerals cases**
Yorgun N.
RADIOCHIMICA ACTA, vol.107, no.8, pp.755-765, 2019 (Journal Indexed in SCI)
- XI. **Gamma photon protection properties of some cancer drugs for medical applications**
Yorgun N., KAVAZ E.
RESULTS IN PHYSICS, vol.13, 2019 (Journal Indexed in SCI)
- XII. **Evaluation of gamma-ray attenuation properties of lithium borate glasses doped with barite, limonite and serpentine**
Yorgun N., KAVAZ E., Oto B., AKDEMİR F.
RADIOCHIMICA ACTA, vol.106, no.10, pp.865-872, 2018 (Journal Indexed in SCI)
- XIII. **Gamma ray buildup factors of lithium borate glasses doped with minerals**
KAVAZ E., Yorgun N.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.752, pp.61-67, 2018 (Journal Indexed in SCI)
- XIV. **Determining radiological hazards due to the natural radioactivity in building materials used in Van, Turkey**
Yildiz-Yorgun N., GÜR FİLİZ F., Özdemir Ö. F. , Oto B.
Fresenius Environmental Bulletin, vol.27, no.6, pp.4448-4454, 2018 (Journal Indexed in SCI Expanded)
- XV. **Natural radioactivity-based radiological hazards in soils of the islands: a case study from Eastern Turkey**
Oto B., Yıldız N., Şeremet M.
RADIOCHIMICA ACTA, vol.105, no.9, pp.763-773, 2017 (Journal Indexed in SCI)
- XVI. **Neutron shielding qualities and gamma ray buildup factors of concretes containing limonite ore**
Oto B., Yıldız N., Korkut T., KAVAZ E.
Nuclear Engineering and Design, vol.293, pp.166-175, 2015 (Journal Indexed in SCI)
- XVII. **Investigation of gamma radiation shielding properties of various ores**

Oto B., Yıldız N., Akdemir F., KAVAZ E.

PROGRESS IN NUCLEAR ENERGY, vol.85, pp.391-403, 2015 (Journal Indexed in SCI)

XVIII. **Radionuclide determination and radioactivity evaluation of surface soil samples collected along the Ercek Lake basin in eastern Anatolia, Turkey**

Yıldız N., Oto B., Turhan S., UGUR F. A. , Goren E.

JOURNAL OF GEOCHEMICAL EXPLORATION, vol.146, pp.34-39, 2014 (Journal Indexed in SCI)

XIX. **Dating of the Sediment Accumulation Rate, Radioactive and Heavy Metal Pollution in the Van Lake**

Yıldız N., Yener G.

EKOLOJİ, vol.19, no.77, pp.80-87, 2010 (Journal Indexed in SCI)

Articles Published in Other Journals

I. **Gamma-ray Shielding Properties of Lithium Borate Glass Doped with Colemanit Mineral**

Yıldız N.

Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.8, no.3, pp.762-771, 2019 (National Refreed University Journal)

II. **39K ve 41K İzotoplarının 0-20 MeV Enerji Aralığında Nötron Reaksiyonları Tesir Kesiti Hesaplamaları**

Yıldız N., Özdemir Ö. F.

Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.22, no.1, pp.33-40, 2017 (National Refreed University Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Determination Of Natural Radioactivity Levels Of Soil Samples In Lake Turna Surrounding In Van Province**

Yıldız H., Yıldız N., GÜR FİLİZ F.

3. ULUSLARARASI SOSYAL ve BEŞERİ BİLİMLER KONGRESİ, Van, Turkey, 20 - 22 September 2019, pp.24

II. **Some Ternary Intermetallic Compounds as a Protective Material Against Gamma- rays**

Yıldız N.

4th International Conference On Advances in Natural and Applied Sciences, Ağrı, Turkey, 19 - 22 June 2019, pp.81

III. **RADIATION ATTENUATION COEFFICIENTS OF THE SOME CANCER DRUGS FOR MEDICAL APPLICATIONS**

Yıldız N., KAVAZ E.

I. INTERNATIONAL İĞDIR CONGRESS ON MULTIDISCIPLINARY STUDIES, İğdir, Turkey, 6 - 07 November 2018, pp.255

IV. **Excitation Function of Photo-Neutron Reactions for Selected Isotopes Used in Reactor Structural Materials**

Özdemir Ö. F. , Yıldız N.

1st INTERNATIONAL ENGINEERING AND TECHNOLOGY SYMPOSIUM, Batman, Turkey, 3 - 05 May 2018, pp.61

V. **Radioactivity concentrations and gamma dose rates in soil samples of metropolitan areas Van, Turkey**

Yıldız N., GÜR FİLİZ F., Tarakçı M., Oto B., Özdemir Ö. F.

Uluslararası ve Disiplinlerarası Çevre ve Edebiyat Sempozyumu, Manisa, Turkey, 1 - 03 November 2017, pp.34

VI. **Van Gölü Hidrojeokimyası ve Su Kirliliği Değerlendirmesi**

Aydın H., Öğün E., Aydın F., Selçuk Zorer Ö., Atıcı A. A. , Çavuş A., Özdemir Ö. F. , Bora G., Bozlar Pınaroğlu B., Şen F., et al.

Ulusal Çevre, Deniz ve Kıyı Kirliliği Sempozyumu (UCEDKKS), Bursa, Turkey, 10 - 12 October 2017, vol.000, no.0

VII. **Photo-Neutron Cross Section Calculations of Selected Steel Components**

Özdemir Ö. F. , Yıldız N.

- VIII. **Cross Section Calculation of Neutron Poison Isotopes by Nuclear Reaction Models**
Yıldız N., Kartal R., Özdemir Ö. F. , Yıldız H.
3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017, pp.99
- IX. **The (n,?) Cross Section Calculations at 2-20 MeV Energy Range of Some Structural Materials Used in Nuclear Reactors**
Özdemir Ö. F. , Yıldız N., Yıldız H., Kartal R.
3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017, pp.101
- X. **Excitation Functions of Neutron Poison Elements Evaluated Using Pre-Equilibrium and Equilibrium Models**
Yıldız N., Kartal R., Özdemir Ö. F. , Yıldız H.
3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017, pp.98
- XI. **Nuclear Model Calculations of (n,?) Reaction Cross Sections for Some Isotopes in Heavy Concrete**
Özdemir Ö. F. , Yıldız N., Yıldız H., Kartal R.
3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017, pp.99
- XII. **(n,?) Reaction Cross Section Calculations of Some Isotopes Used in Nuclear Applications**
Özdemir Ö. F. , Yıldız N., Yıldız H., Kartal R.
3rd International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology, Adana, Turkey, 10 - 12 May 2017, pp.100
- XIII. **Radionuclide characterization in soil samples of the islands of Akdamar, Çarpanak and Adır located on Lake Van, Turkey**
Oto B., Yıldız N., Şeremet M.
2nd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL AND APPLIED SCIENCES, Antalya, Turkey, 18 - 21 April 2017, pp.455
- XIV. **Gamma Radiation Attenuation Properties of Some Ores**
Oto B., Yıldız N., Çakır T.
2nd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL AND APPLIED SCIENCES, Antalya, Turkey, 18 - 21 April 2017, pp.294
- XV. **Van İlinde Kullanılan Yapı Malzemelerindeki Doğal Radyoaktiviteden Kaynaklanan Radyasyon Dozunun Değerlendirilmesi**
GÜR FİLİZ F., Yıldız N., Oto B.
XI. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi,, Aydın, Turkey, 12 - 14 October 2016, pp.77
- XVI. **Radon exhalation rates from building materials using LR-115 nuclear track detectors**
GÜR FİLİZ F., Taşköprü C., Oto B., Yıldız N.
3 rd International Conference on Po and Radioactive Pb Isotopes, Aydın, Turkey, 11 - 14 October 2015, pp.145
- XVII. **Investigation of natural radioactivity of some building materials used in Van**
GÜR FİLİZ F., Yıldız N., Oto B.
International Congress on Green Infrastructure and Sustainable Societies/Cities (GreInSus 2014), İzmir, Turkey, 8 - 10 May 2014, pp.46
- XVIII. **Profile Distributions of 210Pb and 210Po in Lake Van Sediments**
Yıldız N., YENER G., Uğur Görgün A., İçchedef M., Örçen S., Meydan A. F.
The Fiffth Conference Nuclear Science and Application, Ankara, Turkey, 14 - 17 October 2008, pp.55
- XIX. **The Profile Distribution of 137Cs in the Lake Van Sediments**
Pişkin A., YENER G., Uğur Görgün A., GÜR FİLİZ F., Yıldız N.
The Fifth Conference Nuclear Science and Its Applications, Ankara, Turkey, 14 - 17 October 2008, pp.45
- XX. **Dating in Lake Van Sediments Using 210Pb(210Po) Technique**
Yıldız N., Yener G., Uğur Görgün A., İçchedef M., Örçen S., Meydan A. F.

4th International Symposium on In Situ Nuclear Metrology As A Tool For Radioecology, Rabat, Morocco, 13 - 16 October 2008, pp.59

XXI. EVALUATION OF RADIATION DOSE OF TURKISH GRANITES IN TERMS OF HUMAN HEALTH

GÜR FİLİZ F., Yıldız N.

Uluslararası Müzik Dans ve Sağlık Kongresi, Van, Turkey, 11 October 2008 - 13 October 2018, pp.70

Supported Projects

Öğün E., Bozlar Pınaroğlu B., SOLMAZ H., ELP M., Özdemir Ö. F. , Selçuk Zorer Ö., Şen F., Aydın F., Bora G., Gültekin A., et al., Project Supported by Higher Education Institutions, Van Gölünün Mikrobiyolojik, Kimyasal ve Radyoaktif Kirlilik Düzeyinin Araştırılması, 2014 - 2017

Oto B., Yıldız N., Project Supported by Higher Education Institutions, Van Gölünde Bulunan Akdamar, Çarpanak ve Adır Adalarındaki Toprak Numunelerinde Doğal Radyoaktivite Seviyesinin Belirlenmesi ve Gama Doz Hızının Hesaplanması, 2013 - 2016

Yıldız Yorgun N., Oto B., Project Supported by Higher Education Institutions, Van Gölü Kıyısında Bulunan Yerleşim Alanlarının Radyoaktivite Düzeyinin Belirlenmesi ve Gama Doz Hızlarının Hesaplanması, 2012 - 2015

Yıldız N., TUBITAK Project, Orta Gediz Havzasında (Turgutlu-Salihli Arası) Toprak Erozyonu Hızının Radyoaktif Kurşun Dağılımından Belirlenmesi, 2007 - 2009

Activities in Scientific Journals

Radiation Science and Technology, Committee Member, 2018 - Continues

Scientific Refereeing

HELIYON, Journal Indexed in SCI-E, March 2022

MATERIALS RESEARCH BULLETIN, SCI Journal, December 2021

JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, SCI Journal, October 2021

HELIYON, Journal Indexed in SCI-E, October 2021

PHYSICA SCRIPTA, SCI Journal, September 2021

PHYSICA SCRIPTA, SCI Journal, May 2021

PHYSICA SCRIPTA, SCI Journal, April 2021

EUROPEAN PHYSICAL JOURNAL PLUS, SCI Journal, February 2021

PHYSICA SCRIPTA, SCI Journal, November 2020

ÇANAKKALE ONSEKİZ MART ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, National Scientific Refreed Journal, November 2020

PHYSICA SCRIPTA, SCI Journal, August 2020

Radiation Science and Technology, SCI Journal, February 2020

African Journal of Engineering Research, Other Indexed Journal, December 2019

Applied Physics A, SCI Journal, June 2019

Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, National Scientific Refreed Journal, June 2019

Journal of Physics and Chemistry of Solids, SCI Journal, February 2019

Journal of Non-Crystalline Solids, SCI Journal, February 2019

Journal of Physics and Chemistry of Solids, SCI Journal, November 2018

Journal of Physics and Chemistry of Solids, SCI Journal, April 2018

Journal of Non-Crystalline Solids, SCI Journal, March 2018

Edit Congress and Symposium Activities

3. ULUSLARARASI SOSYAL ve BEŞERİ BİLİMLER KONGRESİ, Session Moderator, Van, Turkey, 2019

Citations

Total Citations (WOS):313

h-index (WOS):10