

Lect. PhD HATİCE YILMAZ ALAN

Personal Information

Office Phone: [+90 312 212 0384](tel:+903122120384) Extension: 2703

Email: hyalan@ankara.edu.tr

Web: <https://avesis.ankara.edu.tr/hyalan>

Address: Ankara Üniversitesi Nükleer Bilimler Enstitüsü

International Researcher IDs

ORCID: 0000-0002-9783-4620

Publons / Web Of Science ResearcherID: AAG-3249-2020

ScopusID: 57210785857

Yoksis Researcher ID: 249188

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Occupational Health and Safety, İş Sağlığı ve Güvenliği Eğitim Programı, Ankara Üniversitesi, 2022

Other, İlk Yardımcı Belgesi, AFAD İlk Yardım Eğitim Merkezi, 2022

Dissertations

Doctorate, İstanbul İli Marmaray ve Metro Yer altı Ulaşım İstasyonlarında Radon Seviyelerinin Ölçülmesi, İstanbul University, Institute Of Graduate Studies In Sciences, Fen Fakültesi Bölümü, 2019

Postgraduate, TÜRK HIZLANDIRICI MERKEZİ (THM) SERBEST ELEKTRON LAZERİ OPTİK KAVİTE PARAMETRELERİNİN BELİRLENMESİ VE HESAPLANMASI, Kütahya Dumlupınar University, Fen Bilimleri Enstitüsü, 2010

Research Areas

Physics, Nuclear physics, Natural Sciences

Academic Titles / Tasks

Lecturer PhD, Ankara University, Hızlandırıcı Teknolojileri Enstitüsü, Hızlandırıcı Teknolojileri Anabilim Dalı, 2018 - Continues

Lecturer, Kütahya Dumlupınar University, İLERİ TEKNOLOJİLER TASARIM, ARAŞTIRMA-GELİŞTİRME UYGULAMA VE ARAŞTIRMA MERKEZİ, 2016 - 2018

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Efficacy of Barium and Calcium Additives in Lithium Silicate Glasses for Nuclear Shielding Applications**
Yılmaz Alan H.
PHYSICA SCRIPTA, vol.99, no.7, pp.1-18, 2024 (SCI-Expanded)
- II. **KERMA, projected range, mass stopping power and gamma-ray shielding properties of antimony and tellurium reinforced iron phosphate glasses**
Yılmaz Alan H., Yılmaz A., Susam L. A., Ozturk G., Kilic G., Ilik E., Oktik S., Akkus B., Almisned G., Tekin H. O.
RADIATION PHYSICS AND CHEMISTRY, no.218, pp.1-9, 2024 (SCI-Expanded)
- III. **A study on quality control check of dose distribution in blood bags irradiated by ¹³⁷Cs source blood irradiator by using EBT3 radiochromic film dosimetry**
Alan H., Ünal G., Atakul T., Akyürek S., Yücel H.
RADIATION PHYSICS AND CHEMISTRY, vol.214, 2024 (SCI-Expanded)
- IV. **Non-decreasing monotonic effects of cerium and gadolinium on tellurite glasses toward enhanced heavy-charged particle stopping: alpha-proton particles as major a part of cosmic radiation**
Yılmaz Alan H., Almisned G., Yılmaz A., Susam L. A., Ozturk G., Kilic G., Ilik E., Tuysuz B., Topuzlar S. E., Akkus B., et al.
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, 2023 (SCI-Expanded)
- V. **Exploring the KERMA, mass stopping power and projected range values against heavy-charged particles: A focusing study on Sm, Yb, and Nd reinforced tellurite glass shields**
Yılmaz A., Almisned G., Yılmaz Alan H., Susam L., Öztürk G., Kılıç G., Tüysüz B., Akkuş B., Tekin H. O.
RADIATION PHYSICS AND CHEMISTRY, vol.212, pp.1-7, 2023 (SCI-Expanded)
- VI. **Tailoring a Behavioral Symmetry on KERMA, Mass Stopping Power and Projected Range Parameters against Heavy-Charged Particles in Zinc-Tellurite Glasses for Nuclear Applications**
Susam L., Yılmaz A., Yılmaz Alan H., Kılıç G., Akkuş B., Tekin H. O.
SYMMETRY, vol.15, no.6, pp.1-12, 2023 (SCI-Expanded)
- VII. **Towards a better understanding of detection properties of different types of plastic scintillator crystals using physical detector and MCNPX code**
YILMAZ A., YILMAZ ALAN H., Susam L. A., AKKUŞ B., ALMisned G., İlhan T. B., Tekin H.
Nuclear Engineering and Technology, vol.54, no.12, pp.4671-4678, 2022 (SCI-Expanded)
- VIII. **ESTIMATION OF COSMIC RADIATION DOSE RECEIVED ON FLIGHT BY MEANS OF DIFFERENT MACHINE LEARNING METHODS AND CARL-7A CALCULATIONS**
Yılmaz A., YILMAZ ALAN H., Faydasicok O., Susam L. A., ŞAMLI R., Akkus B., Erol A., Gudekli E., Inci C. I., Emirhan M. E.
ROMANIAN JOURNAL OF PHYSICS, vol.67, no.1-2, 2022 (SCI-Expanded)
- IX. **DEEP NEURAL NETWORKS AS A TOOL TO ESTIMATION OF COSMIC RADIATION DOSE RECEIVED ON FLIGHT**
Yılmaz A., YILMAZ ALAN H., Faydasicok O., Susam L. A., ŞAMLI R., Akkus B., Erol A., Gudekli E., Inci C. I., Emirhan M. E.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, vol.84, no.2, pp.187-202, 2022 (SCI-Expanded)
- X. **COSMIC RADIATION EXPOSURE CALCULATIONS FOR INTERNATIONAL AND DOMESTIC FLIGHTS DEPARTS FROM ISTANBUL AND ANKARA**
Susam L. A., Alan H. Y., YILMAZ ALAN H., Erol A., Inci C. I., Akinci F. C., Akkus B., DEMİR M., Emirhan M. E., Faydasicok O., et al.
RADIATION PROTECTION DOSIMETRY, vol.192, no.1, pp.61-68, 2020 (SCI-Expanded)
- XI. **Investigation of radon concentrations of underground metro and Marmaray stations in Istanbul**
Alan H., AKKUŞ B., Susam L. A.
Journal of Radioanalytical and Nuclear Chemistry, vol.322, no.2, pp.291-304, 2019 (SCI-Expanded)

Articles Published in Other Journals

- I. **A Study on the Effect of Addition Li, Na, and K on the Radiation Shielding Capabilities of B2O3-TeO2-ZnO-PbF2-Er2O3 Glass Structure**
Yılmaz Alan H.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.24, no.4, pp.789-797, 2024 (Peer-Reviewed Journal)
- II. **An investigation on protection properties of Tantalum (V) oxide reinforced glass screens on unexposed breast tissue for mammography examinations**
Yılmaz Alan H., Almisned G., Yılmaz A., Susam L., Ilik E., Kilic G., Ozturk G., Tuysuz B., Akkus B., Tekin H. O.
RADIOGRAPHY, vol.30, no.1, pp.282-287, 2024 (ESCI)
- III. **TURKISH ACCELERATOR CENTER STRUCTURE OF OPTICAL CAVITIES**
Yıldız H., Yılmaz Alan H.
Balkan Physics Letter, vol.16, 2009 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Investigation of Homogeneity of Dose Given to Blood in 137Cs Source Blood Irradiator Device by Radiochromic Film Dosimetry and Evaluation of Alternative Irradiation Devices (137Cs Kaynaklı Kan Işınlayıcı Cihazda Kana Verilen Doz Homojenliğinin Radyokromik Film Dozimetrisi ile İncelenmesi ve Alternatif Işınlama Cihazlarının Değerlendirilmesi)**
Yılmaz Alan H., Yücel H., Ünal G., Atakul T.
DYUK 22:I. Disiplinlerarası Yaklaşımlar Ulusal Kongresi, İstanbul, Turkey, 16 May 2022, pp.20
- II. **DEEP LEARNING APPROACH TO CALCULATION OF COSMIC RADIATION DOSE FOR AIRCREW**
Yılmaz A., Yılmaz Alan H., Susam L.
TURKISH PHYSICAL SOCIETY 37TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 1 - 05 September 2021, pp.201
- III. **TARLA Laboratuvarında Nükleer Rezonans Floresansı İçin Gama Spektroskopi Sistemi ve Diğer Uygulamalar**
Yılmaz Alan H., Dapo H.
Parçacık Hızlandırıcıları ve Algıçları Yerel Altyapı ve Ar-Ge Çalıştayı, İstanbul, Turkey, 29 November 2020, no.24, pp.10
- IV. **Nuclear Applications Proposal at TARLA Facility**
Yılmaz Alan H., Dapo H.
TURKISH PHYSICAL SOCIETY 36TH INTERNATIONAL PHYSICS CONGRESS, SEPTEMBER 1-5, 2020, İSTANBUL /TURKEY, İstanbul, Turkey, 1 - 05 September 2020, pp.146
- V. **TARLA RADIATION SAFETY SYSTEM**
Yılmaz Alan H.
7th Internationally Participated Congress on Particle Accelerators and Applications, Muğla, Turkey, 2 - 03 September 2019, pp.12
- VI. **DETERMINATION OF RADON LEVELS IN ISTANBUL UNDERGROUND TRANSPORTATION SYSTEMS**
Yılmaz Alan H., Akkuş B., Susam L., Aytan Ö.
19th International Balkan Workshop on Applied Physics, Constanta, Romania, 16 - 19 July 2019, pp.102-103

Supported Projects

Yılmaz Alan H., Yavaş Ö., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Turkish Accelerator Center Technical Design and Test Laboratories, 2006 - 2015

Yılmaz Alan H., Çetin S. A., Other International Funding Programs, CERN-ATLAS Deneyinde Dedektör, Fenomoloji ve Veri Analiz Çalışmaları, 2008 - 2011

Patent

Yılmaz Alan H., Yılmaz A., Susam L., Akkuş B., Emirhan M. E., MARUZ KALINAN KOZMİK RADYASYONU TAKİP ETMEK İÇİN BİR MOBİL CİHAZ, Patent, CHAPTER G Physics, The Invention Recourse Number: 2022/011623 , Standard Registration, 2022

Activities in Scientific Journals

Journal of Nuclear Sciences, Technical Redactor, 2022 - Continues

Scientific Refereeing

Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, November 2023

JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, Journal Indexed in SCI-E, July 2020

JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, Journal Indexed in SCI-E, March 2020

JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, Journal Indexed in SCI-E, November 2019

JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, Journal Indexed in SCI-E, September 2019

Tasks In Event Organizations

Yılmaz Alan H., TURKISH PHYSICAL SOCIETY 39th INTERNATIONAL PHYSICS CONGRESS, Scientific Congress, Muğla, Turkey, Eylül 2023

Yılmaz Alan H., 8th Internationally Participated Congress on Particle Accelerators and Applications, Scientific Congress, Turkey, Eylül 2022

Yılmaz Alan H., TURKISH PHYSICAL SOCIETY 38th INTERNATIONAL PHYSICS CONGRESS, Scientific Congress, Turkey, Eylül 2022

Yılmaz Alan H., TURKISH PHYSICAL SOCIETY 37TH INTERNATIONAL PHYSICS CONGRESS, SEPTEMBER 1-5, 2021, BODRUM/TURKEY, Scientific Congress, Turkey, Eylül 2021

Yılmaz Alan H., 7th Internationally Participated Congress on Particle Accelerators and Applications, Scientific Congress, Muğla, Turkey, Eylül 2019

Yılmaz Alan H., XIII. UPHDYO ULUSAL PARÇACIK HIZLANDIRICILARI VE DEDEKTÖRLERİ YAZ OKULU, Scientific Congress, Ankara, Turkey, Temmuz 2019

Metrics

Publication: 21

Citation (WoS): 12

Citation (Scopus): 9

H-Index (WoS): 2

H-Index (Scopus): 2

Congress and Symposium Activities

TENMAK, Çevre Korunmasında Radyasyon Teknolojisi, 17-18 Ekim 2022, Ankara, Türkiye, Attendee, Ankara, Turkey, 2022

- 4. Nesil Nükleer Reaktör Teknolojileri Toplantısı, Attendee, Ankara, Turkey, 2022