

Assoc. Prof. TUBA AKKUŞ

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International Researcher IDs

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Education Information

Doctorate, Ataturk University, Fen Bilimleri, Fizik, Turkey 2010 - 2016

Postgraduate, Ataturk University, Fen Bilimleri, Fizik, Turkey 2007 - 2010

Undergraduate, Ataturk University, Fen Fakültesi, Fizik, Turkey 2003 - 2007

Dissertations

Doctorate, U, Pb, Hf, Sm ve Sb elementlerinin bazı L alt tabaka x-ışınlarının açısal dağılımlarının deneysel tayini, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, 2016

Postgraduate, PALANDÖKEN DAĞI VE ÇEVRESİNİN ATMOSFERİK ÖZELLİKLERİNİN BELİRLENMESİ, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, 2010

Research Areas

Physics, Atomic and Molecular Physics, Atomic Spectra and Photon Interactions, Natural Sciences

Academic Titles / Tasks

Associate Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2020 - Continues

Assistant Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2018 - 2020

Assistant Professor, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2017 - 2018

Research Assistant PhD, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2016 - 2017

Research Assistant, Ataturk University, Fen Fakültesi, Fizik, 2012 - 2016

Research Assistant, Erzincan Binali Yıldırım University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2010 - 2012

Courses

Atom ve Molekül Fiziği, Undergraduate, 2021 - 2022, 2020 - 2021

Genel Fizik, Undergraduate, 2020 - 2021

X-İşını Spektroskopisinde Temel Hesaplar, Postgraduate, 2020 - 2021, 2018 - 2019

Fizik I, Undergraduate, 2021 - 2022

X İşimi Spektroskopisinde Temel Konular, Postgraduate, 2021 - 2022

Fizik II, Undergraduate, 2020 - 2021

Genel Fizil Lab., Undergraduate, 2019 - 2020

Genel Fizik, Undergraduate, 2020 - 2021

Fizik II, Undergraduate, 2019 - 2020

Fizik II, Undergraduate, 2019 - 2020

Atom ve Molekül Fiziği Lab, Undergraduate, 2020 - 2021

Fizikte Spektroskopı, Undergraduate, 2019 - 2020

Genel Fizik II, Undergraduate, 2019 - 2020

X ve Gama-Işimi Spektroskopisinde Dedektörler, Postgraduate, 2018 - 2019

Genel Fizik, Undergraduate, 2019 - 2020, 2017 - 2018

Fizik I, Undergraduate, 2019 - 2020, 2018 - 2019

Fizik II, Undergraduate, 2019 - 2020, 2017 - 2018

Genel Fizik II, Undergraduate, 2018 - 2019

Fizik I, Undergraduate, 2018 - 2019

Fizik, Undergraduate, 2018 - 2019

Fizik II, Undergraduate, 2017 - 2018

Fizikte Temel Kavramlar, Undergraduate, 2018 - 2019

Genel Fizik, Undergraduate, 2017 - 2018

Genel Fizik I, Undergraduate, 2017 - 2018

Genel Fizik Lab I, Undergraduate, 2017 - 2018

Advising Theses

Akkuş T., Bazı Elementlerin Koherent / Compton Saçılma Diferansiyel Tesir Kesiti Oranlarının Saçılma Açısına Bağlı Olarak Hesaplanması, Postgraduate, M.ALKAN(Student), Continues

Akkuş T., Farklı foton enerjilerinde bazı mocu alaşımlarının radyasyon soğurma parametrelerinin belirlenmesi, Postgraduate, S.BİLGİÇ(Student), 2020

Jury Memberships

Post Graduate, Post Graduate, Erzincan Binali Yıldırım Üniversitesi, January, 2022

Post Graduate, Post Graduate, Erzincan Binali Yıldırım Üniversitesi, January, 2022

Doctoral Examination, Doctoral Examination, Atatürk Üniversitesi, March, 2021

Doctorate, Doctorate, Atatürk Üniversitesi, February, 2021

Doctorate, Doctorate, Atatürk Üniversitesi, June, 2020

Post Graduate, Post Graduate, Erzincan Binali Yıldırım Üniversitesi, August, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

I. An experimental work on radiation scattering features of some thermoluminescent dosimetry materials

YILMAZ D., AKKUŞ T.

Radiation Physics and Chemistry, vol.216, 2024 (SCI-Expanded)

II. An experimental study on chemical shifts and X-ray intensity ratios

Ügurlu M., AKKUŞ T., Akbulut O., DEMİR L., YILMAZ D.

Applied Radiation and Isotopes, vol.198, 2023 (SCI-Expanded)

III. Influence of the sample thickness upon the albedo factors using 59.54 and 662 keV photon energies

- Yılmaz D., Akkuş T., Kalecik S.
Instrumentation Science & Technology, no.3, pp.1-9, 2022 (SCI-Expanded)
- IV. Determination of L X-ray fluorescence cross-sections in the atomic range of elements $57 \leq Z \leq 69$ in an external magnetic field
Uğurlu M., AKKUŞ T., DEMİR L.
Journal of Molecular Structure, vol.1244, 2021 (SCI-Expanded)
- V. Albedo factors of some boron compounds at 59.54 keV
YILMAZ D., AKKUŞ T.
APPLIED RADIATION AND ISOTOPES, vol.174, 2021 (SCI-Expanded)
- VI. Determination of number, energy and dose albedos of samples with various mean atomic number for 59.54 keV gamma-rays
Akkuş T.
Radiation Physics and Chemistry, vol.170, 2020 (SCI-Expanded)
- VII. Measurement of coherent to Compton scattering differential cross-section ratios of cadmium at different momentum transfer factors
AKKUŞ T.
CANADIAN JOURNAL OF PHYSICS, vol.98, no.1, pp.102-106, 2020 (SCI-Expanded)
- VIII. The effect of enhancement factor on the angular dependence of L x-ray intensity ratios for Sm, Hf, Pb and U
AKKUŞ T., YILMAZ D., Ugurlu M.
RADIATION PHYSICS AND CHEMISTRY, vol.166, 2020 (SCI-Expanded)
- IX. Mean atomic number analysis by the coherent to backscattering intensity ratios at 59.54 and 661.62 photon energies
AKKUŞ T., YILMAZ D.
APPLIED RADIATION AND ISOTOPES, vol.155, 2020 (SCI-Expanded)
- X. The magnetic field effect of K X-ray fluorescence parameters of elements in the range $39 \leq z \leq 48$
Uğurlu M., Akkuş T., DEMİR L.
Canadian Journal of Physics, vol.98, no.2, pp.217-221, 2020 (SCI-Expanded)
- XI. Dependence of albedo factors on mean atomic number for 662 keV gamma photons
AKKUŞ T., YILMAZ D.
APPLIED RADIATION AND ISOTOPES, vol.154, 2019 (SCI-Expanded)
- XII. Variation of coherent to Compton scattering differential cross-section ratios of some lanthanides with the external magnetic field at 59.54 keV
AKKUŞ T., Ugurlu M., DEMİR L.
RESULTS IN PHYSICS, vol.13, 2019 (SCI-Expanded)
- XIII. Effect of mechanical noise upon X-ray fluorescence analysis
YILMAZ D., PİRİMOĞLU DAL M., AKKUŞ T.
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.47, no.6, pp.666-677, 2019 (SCI-Expanded)
- XIV. Angular dependence of L X-rays of samarium, hafnium, and lead
AKKUŞ T., YILMAZ D., Sahin Y.
SPECTROSCOPY LETTERS, vol.52, no.5, pp.261-266, 2019 (SCI-Expanded)
- XV. Variation of scattering intensity ratios with mean atomic number using a dilution technique in EDXRF
AKKUŞ T., UZUNOĞLU Z., YILMAZ D.
APPLIED RADIATION AND ISOTOPES, vol.145, pp.7-11, 2019 (SCI-Expanded)
- XVI. The coherent to Compton scattering differential cross section ratios of some fifth period elements in the external magnetic field
Uğurlu M., Akkus T., Demir L.
Indian Journal of Physics, 2019 (SCI-Expanded)
- XVII. X- and gamma-ray irradiation effects on vanadium pentoxide thin films
YILMAZ D., GÜZELDİR B., AKKUŞ T., ÖZNÜLÜER T.

- SPECTROSCOPY LETTERS, vol.51, no.6, pp.297-301, 2018 (SCI-Expanded)
- XVIII. L-shell differential cross-section and alignment of uranium at 59.54-keV photon energy
AKKUŞ T., Alim B., YILMAZ D., Sahin Y.
APPLIED RADIATION AND ISOTOPES, vol.130, pp.60-65, 2017 (SCI-Expanded)
- XIX. Effects of graphite on the synthesis of 1-D single crystal In₂O₃ nanostructures at high temperature
Tuzluca F. N., YEŞİLBAĞ Y. Ö., AKKUŞ T., ERTUĞRUL M.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.66, pp.62-68, 2017 (SCI-Expanded)
- XX. Determination of coherent to Compton scattering differential cross section ratios of some inorganic materials with EDXRF
yilmaz d., şimşek ü., AKKUŞ T., şahin y.
CANADIAN JOURNAL OF PHYSICS, vol.95, no.4, pp.407-411, 2017 (SCI-Expanded)
- XXI. The K-beta/K-alpha intensity ratios of some elements at different azimuthal scattering angles at 59.54 keV
Akkus T., Sahin Y., YILMAZ D., Tuzluca F. N.
CANADIAN JOURNAL OF PHYSICS, vol.95, no.3, pp.220-224, 2017 (SCI-Expanded)
- XXII. Azimuthal and polar angle dependence of L X-ray differential cross-sections of Yb at 59.54 keV photon energy
Akkuş T., ŞAHİN Y., YILMAZ D.
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.366, pp.145-149, 2016 (SCI-Expanded)
- XXIII. Polar and azimuthal angular dependence of coherent to incoherent scattering differential cross-section ratios of Au at 59.54keV
Akkuş T., PİRİMOĞLU DAL M., Şahin Y.
Radiation Physics and Chemistry, vol.117, pp.167-171, 2015 (SCI-Expanded)
- XXIV. Investigation of the effective atomic numbers of dosimetric materials for electrons, protons and alpha particles using a direct method in the energy region 10 keV–1 GeV: a comparative study
KURUDİREK M., Aksakal O., Akkuş T.
Radiation and Environmental Biophysics, vol.54, no.4, pp.481-492, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. Angular Distribution of L Alpha and L Beta X-Rays of Antimony at 59.54 keV
Akkuş T., Alkan M., Şahin Y.
Journal of Anatolian Physics and Astronomy , vol.1, no.1, pp.1-6, 2021 (Peer-Reviewed Journal)
- II. Analysis of Magnetic Field Effects on K? And K β XRF Spectra of Selenide Compounds
DURDAĞI S., Çümen H., Hatipoğulları M. M., AKKUŞ T.
ALKÜ Fen Bilimleri Dergisi, pp.52-58, 2018 (Peer-Reviewed Journal)
- III. An experimental study on the angular dependence of coherent to Compton scattering differential cross-section ratios of calcium
AKKUŞ T.
TURKISH JOURNAL OF PHYSICS, vol.42, no.4, pp.368-377, 2018 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. THE CONCENTRATION EFFECT TO K-SHELL FLUORESCENCE CROSS SECTIONS OF Ti_xCo_{1-x} ALLOYS
UĞURLU M., AKKUŞ T.
35th International Physics Congress , 2019, Muğla, Turkey, 4 - 08 September 2019, pp.278
- II. DETERMINATION OF L₃ SUBSHELL FLUORESCENCE YIELDS AND LEVEL WIDTHS FOR W AND U IN THE EXTERNAL MAGNETIC FIELD

- YILMAZ D., AKKUŞ T., UZUNOĞLU Z.
MAS INTERNATIONAL CONFERENCE ON MATHEMATICS-ENGINEERING-NATURAL&MEDICAL SCIENCES-V,
Erzurum, Turkey, 2 - 05 May 2019, pp.136-140
- III. **L X-RAY DIFFERENTIAL CROSS-SECTION OF LEAD AT SEVERAL SCATTERING ANGLES AT 59.54 KEV**
BİLGİÇ S., AKKUŞ T., YALÇIN P.
II. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALAR KONGRESİ, 18 - 20 January 2019
- IV. **X-RAY FLUORESCENCE ANALYSIS OF SOME ELEMENTS WITH PEAK TO COMPTON INTENSITY RATIOS AT 59.54 KEV**
BİLGİÇ S., AKKUŞ T., UĞURLU M.
ZEUGMA II. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALAR KONGRESİ, Gaziantep, Turkey, 18 - 20 January 2019, pp.267-270
- V. **K-SHELL X-RAY INTENSITY RATIOS OF FERROMAGNETIC METALS AT 22.69 keV ENERGY**
AKKUŞ T., UĞURLU M., BİLGİÇ S.
IV. ULUSLARARASI MESLEKİ VE TEKNİK BİLİMLER KONGRESİ, Erzurum, Turkey, 7 - 09 December 2018, pp.170
- VI. **Analysis of Magnetic Field Effects on K? and K? XRF Spectra of Selenide Compounds**
Çümen H., ATABAY M. M., AKKUŞ T., DURDAĞI S.
XI. International Conference on Nuclear Structure Properties, Trabzon, Turkey, 12 September - 14 October 2018, pp.10
- VII. **X-Ray Spectrometric Analysis by Various Spectral Ratio Methods**
AKKUŞ T.
Turkish Physical Society 34rd International Physics Congress, Muğla, Turkey, 5 - 09 September 2018, pp.257
- VIII. **Al, Sn, Lu ve Pt Elementlerinin Albedo Parametrelerinin Belirlenmesi**
ŞAHİN Y., AKKUŞ T., BOYDAŞ E., YILMAZ D.
International Scientific Researches Congress, Mardin, Turkey, 10 - 13 May 2018, pp.1
- IX. **L X-ray Relative Intensity Ratios of Uranium, Lead, Hafnium and Samarium**
AKKUŞ T., DURDAĞI S., YILMAZ D., Sahin Y.
34th International Physics Congress of the Turkish-Physical-Society (TPS), Konacık, Turkey, 5 - 09 September 2018, vol.2042
- X. **The effect of the concentration of alloying element on The Total MassAttenuation Coefficients, Atomic and Electronic Cross-Sections,Effective Atomic and Electron Numbers of NixCr_{1-x} alloys at 661,661keV Energy**
AKKUŞ T., ALIM B., UĞURLU M., DEMİR L.
2nd International Conference on Advanced EngineeringTechnologies (ICADET 2017), 21 - 23 September 2017
- XI. **The effect of the concentration of alloying element on the total mass attenuation coefficents, atomic and electronic cross sections, effective atomic numbers of NixCr_{1-x} alloys at 661.661 keV energy**
AKKUŞ T., alim b., uğurlu m., demir l.
2nd International conference on advanved engineering technologies, Bayburt, Turkey, 21 - 23 September 2017, pp.389
- XII. **Magnetic field effect on coherent to incoherent scattering differential cross section ratios of micro structure 3d ferromagnetic transition elements at 59.54 keV**
UĞURLU M., ALIM b., AKKUŞ T., DEMİR L.
Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.249
- XIII. **PbO numune için temel sayma şiddetine numune kalınlığının etkisinin incelenmesi**
ŞAHİN Y., UZUNOĞLU Z., YILMAZ D., AKKUŞ T., BOYDAŞ E.
Adım Fizik Günleri VI, Balıkesir, Turkey, 19 - 21 July 2017, pp.19
- XIV. **Investigation of Albedo factors of some elements for 59.54 keV**
Yılmaz D., Boydaş E., AKKUŞ T., Şahin Y., Gürol A., Alım B.
2nd International Conference on Advances in Natural and Applied Sciences, Antalya, Turkey, 18 - 21 April 2017, pp.54
- XV. **Azimuthal angular dependence of K-beta/K-alpha intensity ratios of some elements**
AKKUŞ T., alim b., yılmaz d., şahin y.

- 2nd International Conference on Advances in Natural and Applied Sciences, Antalya, Turkey, 18 - 21 April 2017,
pp.334
- XVI. **Determination of Thickness of Vanadium Pentoxide Thin Film with EDXRF**
Yılmaz D., Güzeldir B., AKKUŞ T., Alım B.
2nd International Conference on Advances in Natural and Applied Sciences, Antalya, Turkey, 18 - 21 April 2017,
pp.335
- XVII. **Angular dependence of coherent to incoherent scattering differential cross-section ratios for Au**
AKKUŞ T., Alım B., Yılmaz D., Şahin Y.
2nd International Conference on Advances in Natural and Applied Sciences, Antalya, Turkey, 18 - 21 April 2017,
pp.71
- XVIII. **Buildup Factors and Kerma for Al₂O₃ and SiO₂ in the Energy Range 0.015-15 MeV**
YILMAZ D., Alım B., AKKUŞ T., GÜZELDİR B.
International Conference on Advances in Natural and Applied Sciences (ICANAS), Antalya, Turkey, 18 - 21 April
2017, vol.1833
- XIX. **A Potential 4+ Class IR Telescope in East Anatolia, Turkey**
Yeşilyaprak C., AKKUŞ T.
Telescopes from Afar, 28 February - 04 March 2011
- XX. **Palandöken Dağı'nın Atmosferik Özellikleri ve Astronomik Görüş Özellikleri**
yeşilyaprak c., AKKUŞ T.
17. Ulusal Astronomi Kongresi, Adana, Turkey, 31 August - 05 September 2010
- XXI. **Palandöken Dağının Atmosferik Özellikleri**
Yeşilyaprak C., Akkuş T.
16. Ulusal Astronomi Kongresi, Çanakkale, Turkey, 8 - 12 September 2008

Metrics

Publication: 48
Citation (WoS): 42
Citation (Scopus): 47
H-Index (WoS): 4
H-Index (Scopus): 4