

Prof. Elif BOYDAŞ

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Ataturk University, Fen Fakültesi, Fizik, Turkey 1996 - 2000

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, ATOM NUMARASI 22? Z? 29 OLAN ELEMENTLERIN HALOJENLİ BİLESİKLERİNDE UYARMA ENERJİSİNE BAGLI OLARAK K TABAKASI FLÖRESANS TESİRLERİ ÜZERİNE KİMYASAL ETKİLER, Ataturk Üniversitesi, Fen Fakültesi, Fizik, 2000

Research Areas

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

Academic Titles / Tasks

Professor, Ataturk University, Fen Fakültesi, Fizik, 1994 - Continues

Courses

X-Işını Spektroskopisi-I, Postgraduate, 2020 - 2021

Atom ve Molekül Fiziği, Undergraduate, 2020 - 2021

X-IŞINI SPEKTROSKOPİSİ I, Postgraduate, 2019 - 2020

Fizik I, Undergraduate, 2020 - 2021

Modern Fizik, Undergraduate, 2019 - 2020

Fizik II, Undergraduate, 2019 - 2020

Advising Theses

BOYDAŞ E., Atom Numarası 22 ile 30 Arasında Olan 3d Geçiş Elementlerinin Etkin Atom Numaralarının WDXRF Sisteminde Saçılım VE EDXRF Soğurma Medoduyla İncelenmesi, Postgraduate, E.Cömert(Student), 2015

BOYDAŞ E., Koherent ve Compton Saçılıan X-Işınlarını Kullanarak Fe Elementi İçin Matris Etkilerinin İncelenmesi, Postgraduate, H.Hüseyin(Student), 2013

BOYDAŞ E., Pb Elementlerinin L Tabakası X-Işını Flöresans Şiddetleri Üzerine Matris Etkileri, Postgraduate, E.Narmanlı(Student), 2012

BOYDAŞ E., EDXRF ve WDXRF Spektroskopik Analizlerde Matris Soğurma Etkilerinin Düzeltilmesi, Doctorate, M.Büyükyıldız(Student), 2011

BOYDAŞ E., Atom Numarası 25 ile 30 arasındaki elementlerin La ve Lb X-Işınları yayılama çizgileri üzerine Kimyasal Kaymanın İncelenmesi, Postgraduate, M.Büyükyıldız(Student), 2008

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, July, 2023

Associate Professor Exam, Associate Professor Exam, mersin Üniversitesi, September, 2022

Appointment to Academic Staff - Associate Professorship, Appointment to Academic Staff - Associate Professorship, Atatürk Üniversitesi, September, 2022

Post Graduate, Post Graduate, Atatürk Üniversitesi, September, 2022

Competence In Art Monitoring Commmittee Member, Competence In Art Monitoring Commmittee Member, Atatürk Üniversitesi, August, 2022

Competence In Art Monitoring Commmittee Member, Competence In Art Monitoring Commmittee Member, Atatürk Üniversitesi, January, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, January, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, January, 2022

Competence In Art Monitoring Commmittee Member, Competence In Art Monitoring Commmittee Member, Atatürk Üniversitesi, January, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Atatürk Üniversitesi, November, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, September, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, September, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, September, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Atatürk Üniversitesi, September, 2020

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Atatürk Üniversitesi, October, 2019

Post Graduate, Y. L. Tez Savunma, Üniversite, May, 2017

Associate Professor Exam, Doç. Sınavı, İTÜ, February, 2017

Post Graduate, Y. L. Tez Savunma, Üniversite, May, 2014

Published journal articles indexed by SCI, SSCI, and AHCI

- I. The differential scattering parameters of different types of materials in Compton energy region for nuclear applications

- Buyukyildiz M., Tuna G., Kurudirek M.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.137, no.7, 2022 (SCI-Expanded)
- II. Characterization of matrix effects for Pb L-shell energy dispersive X-ray fluorescence (EDXRF) in binary compounds of cadmium, copper, molybdenum, and zinc
Narmanlı Han E., BOYDAŞ E.
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.49, pp.616-628, 2021 (SCI-Expanded)
- III. White and some colored marbles as alternative radiation shielding materials for applications
Buyukyildiz M., Kilic A. D., Yilmaz D.
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.175, pp.657-671, 2020 (SCI-Expanded)
- IV. The use of scattering peaks for matrix effect correction in WDXRF analysis
YILMAZ D., BOYDAŞ E.
Radiation Physics and Chemistry, vol.153, pp.17-20, 2018 (SCI-Expanded)
- V. Measurement of photon interaction parameters of high-performance polymers and their composites
Buyukyildiz M., Tasdelen M. A., KARABUL Y., ÇAĞLAR M., İÇELİ O., BOYDAŞ E.
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.173, pp.474-488, 2018 (SCI-Expanded)
- VI. Quantitative X-Ray Analysis for Cr-Fe Binary Ferroalloys by Using EDXRF-WDXRF Techniques
Buyukyildiz M., Boydaş E., Kurudirek M., Orhan E. O.
INSTRUMENTS AND EXPERIMENTAL TECHNIQUES, vol.60, pp.584-588, 2017 (SCI-Expanded)
- VII. Determination of mass attenuation coefficients and effective atomic numbers for compounds of the 3d transition elements
YILMAZ D., BOYDAŞ E., COMERT E.
RADIATION PHYSICS AND CHEMISTRY, vol.125, pp.65-68, 2016 (SCI-Expanded)
- VIII. Characterization of the effective atomic number for first row transition elements by the ratio of coherent to compton scattering intensities obtained by wavelength dispersive X-ray fluorescence
BOYDAŞ E., YILMAZ D., COMERT E.
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.44, no.6, pp.642-650, 2016 (SCI-Expanded)
- IX. Chemical effects in the K α and K β 1,3 of X-ray emission spectra of Fe
Baydaş E., Öz E.
Journal of Electron Spectroscopy and Related Phenomena, vol.185, pp.27-31, 2012 (SCI-Expanded)
- X. Chemical shifts observed in L α X-ray emission lines of elements in the range of 26 \geq Z \geq 30 in their halogen compounds
Büyükıldız M., Öz E., Baydaş E., KURUDİREK M.
Journal of Radioanalytical and Nuclear Chemistry, vol.291, no.2, pp.467-472, 2012 (SCI-Expanded)
- XI. Effects of chemical combination on x-ray K alpha and K beta(1,3) emission spectra of Co
BOYDAŞ E., Öz E.
PHYSICA SCRIPTA, vol.81, pp.1-6, 2010 (SCI-Expanded)
- XII. Effects of chemical combination on x-ray K alpha and K beta(1,3) emission spectra of Co
BOYDAŞ E., Öz E.
PHYSICA SCRIPTA, vol.81, pp.1-6, 2010 (SCI-Expanded)
- XIII. Chemical shifts of Cr K α and K β 1,3 lines by WDXRF spectrometry
Baydaş E., Öz E.
X-Ray Spectrometry, vol.38, no.5, pp.394-398, 2009 (SCI-Expanded)
- XIV. Standard deviations of the error effects in preparing pellet samples for WDXRF spectroscopy
DEMİR F., BUDAK G., Baydaş E., ŞAHİN Y.
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.243, no.2, pp.423-428, 2006 (SCI-Expanded)
- XV. Measurement of L shell X-ray fluorescence intensity ratios for some elements in the atomic number range of 66 \leq Z \leq 90 by photoionization of consecutive L-subshells
ÖZ E., Baydaş E., ERTUĞRUL M., ŞAHİN Y.
Journal of Radioanalytical and Nuclear Chemistry, vol.260, no.1, pp.75-79, 2004 (SCI-Expanded)
- XVI. Measurement of energy dependence of K X-ray fluorescence cross-sections for Co, Ni and Cu

- halogens compounds**
- Baydaş E., ŞABİN Y., BÜYÜKKASAP E.
Physica Scripta, vol.67, no.6, pp.547-550, 2003 (SCI-Expanded)
- XVII. **Variation of the K β /K α intensity ratios of Ti, V and Cr in halogen compounds versus excitation energy in the interval 5.5-12.1 keV**
Baydaş E., ŞAHİN Y., BÜYÜKKASAP E.
Journal of Radioanalytical and Nuclear Chemistry, vol.256, no.1, pp.27-30, 2003 (SCI-Expanded)
- XVIII. **Measurement of K α and K β X-ray fluorescence cross-sections and the K β /K α intensity ratios for elements in the range 22 \leq Z \leq 29 by 10 keV photons**
Baydaş E., ŞAHİN Y., BÜYÜKKASAP E.
Journal of Quantitative Spectroscopy and Radiative Transfer, vol.77, no.1, pp.87-93, 2003 (SCI-Expanded)
- XIX. **Measurement of X-ray production cross-sections of Ti, V, Cr, Mn, Fe, Co, Ni and Cu molecules**
Söğüt Ö., Baydaş E., BÜYÜKKASAP E., Küçükönder A., ŞAHİN Y.
European Physical Journal D, vol.22, no.1, pp.13-16, 2003 (SCI-Expanded)
- XX. **Variation of K X-ray fluorescence cross-sections of Ti, V and Cr in halogens compounds in energy interval 5.5-12.1 keV**
Baydaş E., SÖGÜT Ö., ŞAHİN Y., BÜYÜKKASAP E.
Journal of Quantitative Spectroscopy and Radiative Transfer, vol.75, no.4, pp.473-480, 2002 (SCI-Expanded)
- XXI. **Chemical effects on L shell fluorescence yields of Ba, La and Ce compounds**
SÖGÜT A., Baydaş E., BÜYÜKKASAP E., ŞAHİN Y., Küçükönder A.
Journal of Radioanalytical and Nuclear Chemistry, vol.251, no.1, pp.119-122, 2002 (SCI-Expanded)
- XXII. **Variation of K X-ray fluorescence cross-sections of Fe in F compounds at an energy interval of 7.6-14.4 keV**
Baydaş E., SÖGÜT Ö., ŞAHİN Y., BÜYÜKKASAP E.
Spectrochimica Acta - Part B Atomic Spectroscopy, vol.57, no.2, pp.375-380, 2002 (SCI-Expanded)
- XXIII. **Chemical effects on K β /K α X-ray intensity ratios of Mo, Ag, Cd, Ba, La, Ce compounds and total mass attenuation coefficients of Fe and Cu**
SÖGÜT Ö., SEVEN S., Baydaş E., BÜYÜKKASAP E., Küçükönder A.
Spectrochimica Acta - Part B Atomic Spectroscopy, vol.56, no.8, pp.1367-1374, 2001 (SCI-Expanded)
- XXIV. **Chmical effects on K K x ray intensity ratios of Mo Ag Cd Ba La Ce compounds and total mass attenuation coefficients of Fe and Cu**
SÖGÜT Ö., SEVEN S., BOYDAŞ E., ERDOĞAN B., KÜÇÜKÖNDER A.
Spectrochimica Acta Part B-Atomic Spectroscopy, vol.56, pp.1367-1374, 2001 (SCI-Expanded)
- XXV. **L X-ray intensity ratios of some elements in the region of 56 \leq Z \leq 83**
Baydaş E., SÖÜT Ö., BÜYÜKKASAP E., ŞAHİN Y.
Journal of Radioanalytical and Nuclear Chemistry, vol.247, no.3, pp.487-489, 2001 (SCI-Expanded)
- XXVI. **Chemical effects on L X-ray fluorescence cross-sections of Ba, La, and Ce compounds**
Baydaş E., SÖGÜT Ö., ŞAHİN Y., BÜYÜKKASAP E.
Radiation Physics and Chemistry, vol.54, no.3, pp.217-221, 1999 (SCI-Expanded)

Books & Book Chapters

- I. **MÜHENDİSLER VE FEN BİLİMCİLER İÇİN FİZİK ELEKTRİK VE MANYETİZMA PROBLEM ÇÖZÜMLERİ**
Boydaş E., Yılmaz D., Yıldırım M., Şahin Y., Duman S., Demir L.
Atatürk Üniversitesi Yayınları, Erzurum, 2022
- II. **MÜHENDİSLER VE FEN BİLİMCİLER İÇİN FİZİK 1. CİLT SORULARI VE ÇÖZÜMLERİ**
GÜROL A., YILMAZ D., BOYDAŞ E., YILDIRIM M., DUMAN S., ŞAHİN Y., GÜRBULAK B., TURGUT G.
Atatürk Üniversitesi Yayınları No: 1233, Erzurum, 2019
- III. **6. İş ve Kinetik Enerji**
BOYDAŞ E.

- in: Fizik, Yusuf Şahin, Muhammet Yıldırım, Editor, Korza Yayınevi, Erzurum, pp.1-12, 2018
- IV. 3. Bölüm ve 4. Bölüm**
GÜRBULAK B., TURGUT G., DUMAN S., YILDIRIM M., ŞAHİN Y., GÜROL A., YILMAZ D., BOYDAŞ E.
in: Mühendislik ve Fen Bilimciler iöin Fizik 1. cilt, Yusuf ŞAHİN, Muhammet YILDIRIM, Editor, Korza Yayıncılık Bilim San. ve Tic. A.Ş, Erzurum, 2018
- V. 7. Potansiyel Enerji ve Enerjinin Korunumu**
BOYDAŞ E.
in: Fizik, Yusuf Şahin. Muhammet Yıldırım, Editor, Korza, Erzurum, pp.1-12, 2018

Refereed Congress / Symposium Publications in Proceedings

- I. **Elemental Analysis on Livers following Boric Acid and Propolis Exposure in Adult Sprague Dawley Rat Using Wavelength-Dispersive X-Ray Fluorescence Spectrometry**
Kavaz E., Durak R., Cinan E., Boydaş E., Özdemir Y., Ekinci N., Koç K.
3rd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL APPLIED SCIENCEPHYSICS, Antalya, Turkey, 9 - 12 May 2018, pp.129
- II. **PbO numune için temel sayma şiddetine numune kalınlığının etkisinin incelenmesi**
ŞAHİN Y., UZUNOĞLU Z., YILMAZ D., AKKUŞ T., BOYDAŞ E.
ADIM Fizik Günleri VI, Balıkesir, Turkey, 19 - 21 July 2017
- III. **Determination of Coherent and Compton Scattering Intensities of Some Elements In the Atomic Range of 20 Z 30 With WDXRF**
BOYDAŞ E., YILMAZ D., ALIM B., HAN İ., ŞAHİN Y.
2nd Internatiol Conference on Advances in Natural and Aplied, 18 - 21 April 2017
- IV. **Investigation of Absorption and Enhancement Effects on L X-rays**
Emine Narmanlı H., BOYDAŞ E., YILMAZ D.
2 nd International Conference on Advances in Natural and Applied Sciences, 18 - 21 April 2017
- V. **Investigation of Absorbtion and Enhancement Effects On L X-Rays**
NARMANLI HAN E., BOYDAŞ E., YILMAZ D.
2nd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL AND APPLIED SCIENCES, 18 - 21 April 2017
- VI. **Investigation of Albedo factors of some elements for 59.54 keV**
YILMAZ D., BOYDAŞ E., AKKUŞ T., ŞAHİN Y., GÜROL A., Alım B.
2 nd International Conference of Advances in Natural and Applied Sciences, 18 - 21 April 2017
- VII. **Determination of Coherent and Compton Scattering Intensity of Some Elements in The Atomic Number Range 20 ≤ Z≤ 30 with WDXRF**
BOYDAŞ E., YILMAZ D., ŞAHİN Y., ALIM B., HAN İ.
Investigation of Albedo Factors of Some Elements for 59.54 keV, 18 - 21 April 2017
- VIII. **Investigation of Albedo Factors of Some Elements for 59.54 keV**
YILMAZ D., BOYDAŞ E., AKKUŞ T., ŞAHİN Y., GÜROL A., ALIM B.
INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL AND APPLIED SCIENCES (ICANAS 2017), Turkey, 18 - 21 April 2017
- IX. **Determination of coherent and Compton scattering Intensities of some elements in the atomic number range 20 Z 30 with WDXRF**
BOYDAŞ E., YILMAZ D., ŞAHİN Y., Alım B., HAN İ.
2 nd International Conference of Advances in Natural and Applied Sciences, 18 - 21 April 2017
- X. **Effects of matrix enhancement to coherent to Compton scattering intensity ratio with WDXRF**
BOYDAŞ E., YILMAZ D., ŞAHİN Y., Alim B., HAN İ.
2 nd International Conference of Advances in Natural and Applied Sciences, 18 - 21 April 2017
- XI. **Effects of Matrix Enhancement to Coherent to Compton Scattering Intensity Ratio with WDXRF**
BOYDAŞ E., YILMAZ D., ŞAHİN Y., ALIM B., HAN İ.
2nd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL AND APPLIED SCIENCES, 18 - 21 April 2017

- XII. **Examination of Absorption Effects at the Compton to Coherent Scattering Intensities X-Rays Using Fe-Ca and Fe-Ti Binary Compounds with WDXRF**
 BOYDAŞ E., BOYDAŞ M. G., Alim B.
 International Conference on Advances in Natural and Applied Sciences (ICANAS), Antalya, Turkey, 18 - 21 April 2017, vol.1833
- XIII. **World Conference on Technology Innovation and EntrepreneurshipChemical shifts of K and K_{1.3}X-ray emission spectra for oxygen compounds of Ti Cr Fe Co Cu with WDXRF**
 BOYDAŞ E., ORHAN E., BOYDAŞ M. G., CÖMERT E.
 World Conference on Technology, Innovation and Entrepreneurship, 28 - 30 May 2015
- XIV. **FABRICATION AND CHARACTERIZATION OF SILICON NITRIDE Si₃N₄ THIN FILMS BY PLASMA ENHANCEMENT CHEMICAL VAPOR DEPOSITION PECVD**
 Odabaş E., Aras G., ORHAN E., BOYDAŞ E.
 World Conference on Technology, Innovation and Entrepreneurship, 28 - 30 May 2015
- XV. **Chemical shifts of K alpha and K beta(1,3) X-ray emission spectra for oxygen compounds of Ti, Cr, Fe, Co, Cu with WDXRF**
 BOYDAŞ E., Orhan E., BOYDAŞ M. G., COMERT E.
 World Conference on Technology, Innovation and Entrepreneurship, İstanbul, Turkey, 28 - 30 May 2015, pp.1757-1761
- XVI. **Analysis of Matrix Absorption Effects for Fe via WDXRF and EDXRF**
 BÜYÜKYILDIZ M., BOYDAŞ E., KURUDİREK M.
 Eighth International Conference on Atomic and Molecular Data and Their Applications, 30 September - 04 October 2012, pp.61
- XVII. **WDXRF Tekniğiyle Drosophila melanogaster in Hibernasyonunda Oluşan Element Değişimlerinin Belirlenmesi**
 Dumlupınar R., Demir F., Şişman T., Erman Ö. K., Budak G., Karabulut A., Boydaş E.
 18. Ulusal Biyoloji Kongresi, Aydın, Turkey, 26 - 30 June 2006

Supported Projects

- YILMAZ D., BOYDAŞ E., GÜROL A., ŞAHİN Y., BİLİCİ E., Project Supported by Higher Education Institutions, Kalitatif X-Işını Spektrometrik Analizleri için Çeşitli Spektral Şiddet Oranı Metotlarının İncelenmesi, 2017 - 2020
- BOYDAŞ E., YILMAZ D., GÜROL A., KURUCU Y., TATLISU R., Project Supported by Higher Education Institutions, WDXRF sistemi kullanılarak Numune Kalınlığına bağlı olarak Compton ve Koherent saçılma Piklerindeki Değişimlerin İncelenmesi, 2018 - 2019
- BOYDAŞ E., Project Supported by Higher Education Institutions, ATOM NUMARASI 13?Z?79 OLAN BAZI ELEMENTLERİN BİLEŞİKLERİNİN ETKİN ATOM NUMARALARINI WDXRF SİSTEMİNDE SAÇILMA VE EDXRF SİSTEMİNDE SOĞURULMA METODLARIYLA İNCELENMESİ, 2015 - 2017
- BOYDAŞ E., Project Supported by Higher Education Institutions, KOHERENT/KOMPTON SAÇILAN X-IŞINLARI İLE MATRİS ETKİLERİNİN BELİRLENMESİ, 2013 - 2014
- BOYDAŞ E., Project Supported by Higher Education Institutions, X-IŞINI SPEKTROMETRİK ANALİZLERDE MATRİS ETKİLERİ, DÜZELTME YÖNTEMLERİ VE BAZI ENDÜSTRİYEL UYGULAMALARI, 2012 - 2014
- BOYDAŞ E., Project Supported by Higher Education Institutions, WDXRF VE EDXRF SİSTEMLERİ KULLANILARAK ATOM NUMARASI 30 İLA 56 ARASINDAKİ ELEMENTLERİN KİMYASAL BİLEŞİKLERİN K VE L X İŞINI ÇİZGİLERİ İNCELENEREK UYDUPİK, ENERJİ KAYMASI FWHM, TABİ ÇİZGİ GENİŞLİĞİ BELİRLENMESİ, 2010 - 2012

Scientific Refereeing

- NUCLEAR PHYSICS AND ATOMIC ENERGY, SCI Journal, January 2022
 RADIATION PHYSICS AND CHEMISTRY, SCI Journal, September 2021

RADIATION PHYSICS AND CHEMISTRY, SCI Journal, August 2021
RADIATION PHYSICS AND CHEMISTRY, SCI Journal, August 2020
RADIATION PHYSICS AND CHEMISTRY, SCI Journal, April 2019
Spectroscopy Letters, SCI Journal, February 2019
Journal of Science and Technology, National Scientific Refreed Journal, February 2019
Project Supported by Higher Education Institutions, April 2016
Spectroscopy and Spectral Analysis, SCI Journal, January 2016
Project Supported by Higher Education Institutions, January 2016

Metrics

Publication: 56
Citation (WoS): 250
Citation (Scopus): 237
H-Index (WoS): 10
H-Index (Scopus): 10

Congress and Symposium Activities

2. International Conference on Advances in Natural and Applied Sciences, Attendee, Turkey, 2017
 1. International Conference on Advances in Natural and Applied Sciences, Attendee, Ağrı, Turkey, 2016
- WORD CONFERENCEON TECHNOLOGY INNOVATIONAND ENRTREPRENEURSHİP, Attendee, İstanbul, Turkey, 2015