

## Prof. TUNCAY BAYRAM

### Personal Information

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### International Researcher IDs

ScholarID: IsDhVBAAAAAJ

ORCID: 0000-0003-3704-0818

Publons / Web Of Science ResearcherID: AAD-1151-2020

ScopusID: 37071788700

Yoksis Researcher ID: 24572

### Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Nükleer Fizik Anabilim Dalı, Turkey 2007 - 2012

Masters (Non-Thesis), Selcuk University, Institute Of Science, Fizik Öğretmenliği, Turkey 2002 - 2003

Undergraduate, Ankara University, Fen Fakültesi, Fizik Bölümü, Turkey 1998 - 2002

### Foreign Languages

Greek, A1 Beginner

English, C1 Advanced

Italian, A2 Elementary

### Dissertations

Doctorate, RELATİVİSTİK ORTALAMA ALAN MODELİNDE ÇEKİRDEK TABAN DURUM ÖZELLİKLERİ, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik/Nükleer Fizik, 2012

### Research Areas

Physics, Nuclear physics, General Nuclear Reactions, Properties of Nuclei, Nuclear Structure, Nuclear Engineering and Nuclear Energy Studies, Radioactive decay and in-beam spectroscopy, Natural Sciences

### Academic Titles / Tasks

Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2020 - Continues

Associate Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2017 - 2020

Researcher, Università Degli Studi di Padova, Institute Of Nuclear Physics (InfN)-Lnl, Legnaro National Laboratories (Lnl), 2018 - 2019

Associate Professor, Sinop University, Faculty Of Engineering-Architecture, Department Of Nuclear Power Engineering, 2015 - 2017

Associate Professor, Sinop University, Faculty Of Arts And Sciences, Department Of Physics, 2014 - 2015

Assistant Professor, Sinop University, Faculty Of Arts And Sciences, Department Of Physics, 2013 - 2014

Research Assistant PhD, Sinop University, Faculty Of Arts And Sciences, Department Of Physics, 2012 - 2013

Research Assistant, Karadeniz Technical University, Fen Fakültesi, Fizik, 2009 - 2012

Research Assistant, Sinop University, Faculty Of Arts And Sciences, Department Of Physics, 2008 - 2009

## Academic and Administrative Experience

Head of Ethics Committee, Karadeniz Technical University, Rektörlük, Science and Engineering Sciences Ethics Committee, 2023 - Continues

Ethics Committee Member, Karadeniz Technical University, Rektörlük, Science and Engineering Sciences Ethics Committee, 2021 - Continues

Head of Department, Karadeniz Technical University, Fen Fakültesi, Fizik, 2021 - 2022

Sinop University, Mühendislik Ve Mimarlık Fakültesi, Nükleer Enerji Mühendisliği Bölümü, 2016 - 2017

Sinop University, Mühendislik Ve Mimarlık Fakültesi, 2015 - 2017

Sinop University, Rektörlük, 2015 - 2017

Sinop University, Fen Bilimleri Enstitüsü, Kuantum Sistemleri Modelleme Anabilimdalı, 2014 - 2017

Sinop University, Rektörlük, 2014 - 2017

Sinop University, Sinop Üniversitesi Enerji Uygulama Ve Araştırma Merkezi, 2014 - 2015

Sinop University, Rektörlük, 2013 - 2015

Sinop University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 2013 - 2015

## Courses

Nuclear Physics Laboratory, Undergraduate, 2021 - 2022

Applications of Nuclear Physics, Undergraduate, 2021 - 2022

Physics II, Undergraduate, 2019 - 2020

Physics I, Undergraduate, 2020 - 2021

Radiation Protection and Radiation Safety, Postgraduate, 2020 - 2021

Nuclear Physics II, Postgraduate, 2020 - 2021

Statistical Physics, Undergraduate, 2020 - 2021

Introduction to Nuclear Energy, Postgraduate, 2019 - 2020

Mechanic, Undergraduate, 2019 - 2020

Physics II, Undergraduate, 2017 - 2018

Modern Physics, Undergraduate, 2017 - 2018

Nuclear Physics I, Postgraduate, 2017 - 2018

Statistical Mechanics, Postgraduate, 2017 - 2018

## Advising Theses

Bayram T., Examining the effect of deformation on ISGMR in medium and heavy nuclei using the QFAM method, Postgraduate, A.KÖSEOĞLU(Student), Continues

Bayram T., Development of Simulation for SPECT and PET Imaging Systems, Doctorate, A.Hayder(Student), Continues

Bayram T., Radioisotope Production Calculations via Proton-Induced Nuclear Reactions, Doctorate, Ş.Şentürk(Student), Continues

Bayram T., Investigation of the Effect of Crystal Dead Layer on System Performance in Single Photon Emission Tomography, Postgraduate, H.Uslu(Student), 2024

Bayram T., Simulation Based Conceptual Design Development and Optimization for intraoperative Gamma Probe, Postgraduate, Ö.Faruk(Student), 2024

Bayram T., Determination of The Effect of Metal Artifact Reduction and Hybrid Dose Reduction Reconstruction Techniques on Effective Radiation Dose And Image Quality in The Orbital Cavity, Postgraduate, M.Polat(Student), 2023

Bayram T., Determination of Half-Life and Transition Energies of Photonuclear Reaction Products of Erbium Nuclei, Postgraduate, S.Uruk(Student), 2017

Bayram T., Improving Nuclear Interaction Parameters for the Relativistic Mean Field Model, Postgraduate, Ş.Şentürk(Student), 2017

## Jury Memberships

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, İstanbul Kültür Üniversitesi, May, 2024

Post Graduate, Post Graduate, Karadeniz Teknik Üniversitesi, March, 2024

Doctoral Examination, Doctoral Examination, Sivas Cumhuriyet Üniversitesi, November, 2023

Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Sinop University, February, 2023

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Karadeniz Teknik Üniversitesi, December, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Fırat Üniversitesi, November, 2022

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Gümüşhane Üniversitesi, November, 2022

Associate Professor Exam, Associate Professor Exam, Karadeniz Teknik Üniversitesi, October, 2022

Associate Professor Exam, Associate Professor Exam, Karadeniz Teknik Üniversitesi, March, 2022

Associate Professor Exam, Associate Professor Exam, Karadeniz Teknik Üniversitesi, October, 2021

Post Graduate, Post Graduate, Karadeniz Teknik Üniversitesi, June, 2021

Post Graduate, Post Graduate, Sinop Üniversitesi, June, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Sinop Üniversitesi, June, 2021

Post Graduate, Post Graduate, Kırıkkale University, March, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Sinop Üniversitesi, February, 2021

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Kastamonu Üniversitesi, November, 2020

Appointment to Academic Staff-Assistant Professorship, Appointment Academic Staff, Sivas Cumhuriyet Üniversitesi, July, 2020

Doctorate, Doktora Tez Savunma Jürisi Üyeliği, Ondokuz Mayıs Üniversitesi, January, 2020

Doctorate, Doktora Tez Savunma Jürisi Üyeliği, Kastamonu Üniversitesi, March, 2018

Appointment to Academic Staff-Assistant Professorship, Yardımcı Doçentlik Atama Jürisi, Bursa Teknik Üniversitesi, September, 2017

Appointment to Academic Staff-Assistant Professorship, Yardımcı Doçentlik Yeniden Atama Jürisi, Sinop Üniversitesi, August, 2017

Appointment to Academic Staff-Assistant Professorship, Yardımcı Doçentlik Atama Jürisi, Sinop Üniversitesi, June, 2017

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Sinop Üniversitesi, June, 2017

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Ondokuz Mayıs Üniversitesi, April, 2017

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Sinop Üniversitesi, May, 2016

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Ondokuz Mayıs Üniversitesi, May, 2016

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Ondokuz Mayıs Üniversitesi, May, 2015

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Akdeniz Üniversitesi, May, 2015

Appointment to Academic Staff-Assistant Professorship, Öğretim Görevlisi Atama Jürisi, Sinop Üniversitesi, September, 2014

Post Graduate, Yüksek Lisans Tez Savunma Jürisi, Ondokuz Mayıs Üniversitesi, May, 2014

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

- I. **Generation of fusion and fusion-evaporation reaction cross-sections by two-step machine learning methods**  
Akkoyun S., Yesilkanat C. M., Bayram T.  
COMPUTER PHYSICS COMMUNICATIONS, vol.297, 2024 (SCI-Expanded)
- II. **Machine learning predictions for cross-sections of  $^{43,44}\text{Sc}$  radioisotope production by alpha-induced reactions on Ca target**  
AKKOYUN S., YEŞILKANAT C. M., BAYRAM T.  
Nuclear Instruments and Methods in Physics Research, Section B: Beam Interactions with Materials and Atoms, vol.549, 2024 (SCI-Expanded)
- III. **Re-analysis of the Gamow-Teller distributions for  $N = Z$  nuclei,  $^{24}\text{Mg}$ ,  $^{28}\text{Si}$ , and  $^{32}\text{S}$**   
Nabi J., Kabir A., Bayram T.  
CHINESE JOURNAL OF PHYSICS, vol.87, pp.797-803, 2024 (SCI-Expanded)
- IV. **Production Cross-section and Reaction Yield of  $^{76}\text{Br}$  for  $\text{NatSe}(p,xn)^{76}\text{Br}$  Reaction Channels**  
Şentürk Ş., BAYRAM T., Hayder A.  
Iranian Journal of Science, 2024 (SCI-Expanded)
- V. **Applications of different machine learning methods on nuclear charge radius estimations**  
BAYRAM T., Yesilkanat C. M., AKKOYUN S.  
PHYSICA SCRIPTA, vol.12, no.12, 2023 (SCI-Expanded)
- VI. **An alternative viewpoint on the nuclear structure towards  $^{100}\text{Sn}$ : Lifetime measurements in  $^{105}\text{Sn}$**   
Pasqualato G., Gottardo A., Mengoni D., Goasduff A., Valiente-Dobón J., Nowacki F., Péru S., Pillet N., de Angelis G., Bakes S., et al.  
PHYSICS LETTERS B, vol.845, 2023 (SCI-Expanded)
- VII. **Re-examination of  $\beta$ -decay in Hg, Pb and Po Isotopes**  
Nabi J., BAYRAM T., Riaz M., Ullah A., Hayder A., Şentürk Ş., Büyükkata M.  
PHYSICA SCRIPTA, vol.98, no.8, 2023 (SCI-Expanded)
- VIII. **Decay Modes and Half-Life of  $^{265-282}\text{Ds}$  Isotopes**  
BAYRAM T., Hayder A., Şentürk Ş.  
Iranian Journal of Science, vol.47, no.3, pp.969-977, 2023 (SCI-Expanded)
- IX. **Quantitative analysis of lung parenchymal involvement in Behcet's disease by the novel automatic program**  
Polat G., Tezcan M. A., Polat M., Barutcuğil F., BAYRAM T., SADE R., KUDAŞ Ö., Pirimoglu R. B., Ismailova E., YALÇIN A., et al.  
INTERNATIONAL JOURNAL OF RHEUMATIC DISEASES, vol.26, no.5, pp.917-921, 2023 (SCI-Expanded)
- X. **Neural network predictions of  $(n,2n)$  reaction cross-sections at 14.6 MeV incident neutron energy**  
AKKOYUN S., Amrani N., BAYRAM T.  
Applied radiation and isotopes : including data, instrumentation and methods for use in agriculture, industry and medicine, vol.191, pp.110554, 2023 (SCI-Expanded)
- XI. **Effect of Nuclear Deformation on Gamow-teller Strength Distributions of Hg Isotopes**  
Nabi J., Riaz M., BAYRAM T., Azaz M.  
BRAZILIAN JOURNAL OF PHYSICS, vol.52, no.5, 2022 (SCI-Expanded)
- XII. **An Investigation on Decay Modes and Half-Life of Nobelium Isotopes**  
BAYRAM T., Hayder A.

- PHYSICS OF ATOMIC NUCLEI, vol.85, no.3, pp.275-281, 2022 (SCI-Expanded)
- XIII. **Effect of front, lateral and back dead layer thicknesses of a HPGe detector on full energy peak efficiency**  
Kaya S., Celik N., Bayram T.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.1029, 2022 (SCI-Expanded)
- XIV. **The nuclear ground-state properties and stellar electron emission rates of Fe-76, Ni-78, Zn-80, Ru-126, Pd-128 and 130Cd using RMF and pn-QRPA models**  
Nabi J., BAYRAM T., Daraz G., Kabir A., Senturk S.  
NUCLEAR PHYSICS A, vol.1015, 2021 (SCI-Expanded)
- XV. **Probing isospin mixing with the giant dipole resonance in the Zn-60 compound nucleus**  
Gosta G., Mentana A., Camera F., Bracco A., Ceruti S., Benzoni G., Blasi N., Brambilla S., Capra S., Crespi F. C. L., et al.  
PHYSICAL REVIEW C, vol.103, no.4, 2021 (SCI-Expanded)
- XVI. **An investigation of gamma ray mass attenuation from 80.1 to 834.86 keV for fabric coating pastes used in textile sector**  
Erenler A., Bayram T., Demirel Y., Cengiz E., Bayrak R.  
Nuclear Science and Techniques, vol.31, 2020 (SCI-Expanded)
- XVII. **Nuclear structure properties and decay rates of molybdenum isotopes**  
Nabi J., BAYRAM T.  
ASTROPHYSICS AND SPACE SCIENCE, vol.365, no.1, 2020 (SCI-Expanded)
- XVIII. **Triaxiality in Neutron-Rich As Isotopes with Covariant Density Functional Theory**  
Bayram T.  
PHYSICS OF ATOMIC NUCLEI, vol.82, no.4, pp.317-323, 2019 (SCI-Expanded)
- XIX. **GROUND-STATE NUCLEAR PROPERTIES OF NEUTRON-RICH COPPER ISOTOPES AND LEPTON CAPTURE RATES IN STELLAR MATTER**  
Nabi J., BAYRAM T., Majid M.  
ACTA PHYSICA POLONICA B, vol.49, no.8, pp.1531-1554, 2018 (SCI-Expanded)
- XX. **Adjustment of Non-linear Interaction Parameters for Relativistic Mean Field Approach by Using Artificial Neural Networks**  
Bayram T., Akkoyun S., Senturk S.  
PHYSICS OF ATOMIC NUCLEI, vol.81, no.3, pp.288-295, 2018 (SCI-Expanded)
- XXI. **Determinations of Er-171 half-life and some Tm-171 transition energies**  
BAYRAM T., AKKOYUN S.  
NUCLEAR SCIENCE AND TECHNIQUES, vol.29, no.3, 2018 (SCI-Expanded)
- XXII. **Transition energy and half-life determinations of photonuclear reaction products of erbium nuclei**  
Bayram T., AKKOYUN S., Uruk S., Dapo H., Dulger F., BOZTOSUN İ.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS E-NUCLEAR PHYSICS, vol.25, no.12, 2016 (SCI-Expanded)
- XXIII. **Energy level and half-life determinations from photonuclear reaction on Ga target**  
AKKOYUN S., Bayram T., Dulger F., Dapo H., BOZTOSUN İ.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS E-NUCLEAR PHYSICS, vol.25, no.8, 2016 (SCI-Expanded)
- XXIV. **Probing for leptophilic gauge boson Z(1) at ILC with root s=1 TeV by using ANN**  
Kara S. O., AKKOYUN S., Bayram T.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS A, vol.29, no.30, 2014 (SCI-Expanded)
- XXV. **Shape of Te isotopes in mean-field formalism**  
Bayram T., YILMAZ A. H.  
PRAMANA-JOURNAL OF PHYSICS, vol.83, no.6, pp.975-983, 2014 (SCI-Expanded)
- XXVI. **Estimations of fission barrier heights for Ra, Ac, Rf and Db nuclei by neural networks**  
AKKOYUN S., Bayram T.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS E-NUCLEAR PHYSICS, vol.23, no.10, 2014 (SCI-Expanded)
- XXVII. **Estimations of beta-decay energies through the nuclidic chart by using neural network**  
AKKOYUN S., Bayram T., Turker T.

- RADIATION PHYSICS AND CHEMISTRY, vol.96, pp.186-189, 2014 (SCI-Expanded)
- XXVIII. **A study on ground-state energies of nuclei by using neural networks**  
Bayram T., AKKOYUN S., KARA S. O.  
ANNALS OF NUCLEAR ENERGY, vol.63, pp.172-175, 2014 (SCI-Expanded)
- XXIX. **NEW PARAMETERS FOR NUCLEAR CHARGE RADIUS FORMULAS**  
Bayram T., AKKOYUN S., KARA S. O., Sinan A.  
ACTA PHYSICA POLONICA B, vol.44, no.8, pp.1791-1799, 2013 (SCI-Expanded)
- XXX. **An analysis of E(5) shape phase transitions in Cr isotopes with covariant density functional theory**  
Bayram T., AKKOYUN S.  
PHYSICA SCRIPTA, vol.87, no.6, 2013 (SCI-Expanded)
- XXXI. **TABLE OF GROUND STATE PROPERTIES OF NUCLEI IN THE RMF MODEL**  
Bayram T., YILMAZ A. H.  
MODERN PHYSICS LETTERS A, vol.28, no.16, 2013 (SCI-Expanded)
- XXXII. **An artificial neural network application on nuclear charge radii**  
AKKOYUN S., Bayram T., KARA S. O., Sinan A.  
JOURNAL OF PHYSICS G-NUCLEAR AND PARTICLE PHYSICS, vol.40, no.5, 2013 (SCI-Expanded)
- XXXIII. **A MICROSCOPIC ANALYSIS ON SHAPE OF RUTHENIUM ISOTOPES**  
Bayram T.  
ROMANIAN JOURNAL OF PHYSICS, vol.58, pp.931-938, 2013 (SCI-Expanded)
- XXXIV. **AN INVESTIGATION ON SHAPE EVOLUTION OF Ti ISOTOPES WITH HARTREE-FOCK-BOGOLIUBOV THEORY**  
Bayram T.  
MODERN PHYSICS LETTERS A, vol.27, no.28, 2012 (SCI-Expanded)
- XXXV. **A computer program for calculation of approximate embryo/fetus radiation dose in nuclear medicine applications.**  
Bayram T., SÖNMEZ B.  
Molecular imaging and radionuclide therapy, vol.21, pp.19-22, 2012 (SCI-Expanded)
- XXXVI. **A Detailed Investigation on the Ground-state Nuclear Properties of Even-even Mo Isotopes by Using the Relativistic Mean Field Approach**  
YILMAZ A. H., BAYRAM T.  
JOURNAL OF THE KOREAN PHYSICAL SOCIETY, vol.59, no.6, pp.3329-3336, 2011 (SCI-Expanded)
- XXXVII. **Radiation dose to technologists per nuclear medicine examination and estimation of annual dose.**  
Bayram T., YILMAZ A. H., DEMİR M., SÖNMEZ B.  
Journal of nuclear medicine technology, vol.39, pp.55-9, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Gamma Ray Shielding Properties and Natural Radioactivity of Some Rocks of Trabzon District, Türkiye**  
Gümrükçüoğlu N., Uzun Duran S., Bayram T., Küçükömeroğlu B., Yılmaz A. H.  
EGYPTIAN JOURNAL OF SOIL SCIENCE, no.3, pp.381-390, 2023 (ESCI)
- II. **Production cross-section and reaction yield of  $^{82}\text{Sr}$  for  $^{82}\text{Sr}/^{82}\text{Rb}$  generator**  
Şentürk Ş., Bayram T., Akkoyun S.  
CUMHURİYET SCIENCE JOURNAL, vol.43, no.4, pp.716-720, 2022 (Peer-Reviewed Journal)
- III. **Investigation of Nuclear Structures of Ne Isotopes by Nuclear Shell Model**  
Akkoyun S., Bayram T.  
Academic Platform Journal of Engineering and Science, vol.9, no.9, pp.296-301, 2021 (Peer-Reviewed Journal)
- IV. **Calculations of Yield Cross-Sections of  $^{51}\text{Cr}$ ,  $^{99}\text{Mo}$  and  $^{133}\text{Xe}$  Radioisotopes via Neutron Induced Reactions**  
BAYRAM T., AKKOYUN S., ŞENTÜRK Ş., HAYDER A.

- Journal of Investigations on Engineering and Technology, vol.3, no.2, pp.55-57, 2020 (Peer-Reviewed Journal)
- V. **Investigation of Nuclear Structures of Self-conjugate Zn, Ge, Se, Kr, Sr Nuclei**  
AKKOYUN S., BAYRAM T.  
International Journal of Advances in Engineering and Pure Sciences, vol.32, no.4, pp.473-477, 2020 (Peer-Reviewed Journal)
- VI. **Ca İzotopları için Nükleer Kabuk Modeli Hesaplamaları**  
AKKOYUN S., BAYRAM T., AYHAN Y.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.9, no.3, pp.1102-1107, 2020 (Peer-Reviewed Journal)
- VII. **Coulomb excitation of  $^{116}\text{Sn}$ . Preliminary Results and Simulations**  
Siciliano M., Goasduff A., Rocchini M., Illana A., Saxena M., de Angelis G., Bakes S., BAYRAM T., Belvedere K., Benzoni G., et al.  
INFN-LNL Annual Report, vol.258, no.1, pp.56-57, 2020 (Peer-Reviewed Journal)
- VIII. **Lifetime Measurements in  $^{105}\text{Sn}$  with the RDDS Technique**  
Pasqualato G., Gottardo A., Goasduff A., Mengoni D., Testov D., Valiente Dobon J. J., de Angelis G., Bakes S. D., BAYRAM T., Bazzacco D., et al.  
INFN-LNL Annual Report, vol.259, no.1, pp.46-47, 2020 (Peer-Reviewed Journal)
- IX. **Shell Model Calculations for Proton-rich Zn Isotopes via New Generated Effective Interaction by Artificial Neural Networks**  
AKKOYUN S., BAYRAM T.  
Cumhuriyet Science Journal, vol.40, pp.570-577, 2019 (Peer-Reviewed Journal)
- X. **A study on Possible Usage of NEDA for Measurements of Beta-delayed Neutron Emissions**  
BAYRAM T.  
INFN-LNL Annual Report, vol.258, 2019 (Peer-Reviewed Journal)
- XI. **Surface Energy Coefficient Determination in Global Mass Formula from Fission Barrier Energy**  
Akkoyun S., BAYRAM T.  
Cumhuriyet Science Journal, vol.38, no.4, pp.711-715, 2017 (Peer-Reviewed Journal)
- XII. **Ground-state properties of some  $N=Z$  nuclei**  
AKKOYUN S., BAYRAM T., ŞENTÜRK Ş.  
Journal of Nuclear Sciences, vol.4, no.2, pp.45-49, 2017 (Peer-Reviewed Journal)
- XIII. **Giant Dipole Resonance Energy Predictions For Sn and U Isotopes**  
AKKOYUN S., BAYRAM T., Özgüven Y.  
Afyon Kocatepe University Journal of Science and Engineering, vol.17, pp.426-431, 2017 (Peer-Reviewed Journal)
- XIV. **Estimations of Radiation Yields for Electrons in Various Absorbing Materials**  
AKKOYUN S., BAYRAM T., YILDIZ N.  
Cumhuriyet University Faculty of Science Science Journal, vol.37, 2016 (Peer-Reviewed Journal)
- XV. **Triaxial RMF Calculations for  $^{124-134}\text{Xe}$  Isotopes**  
BAYRAM T., AKKOYUN S., ŞENTÜRK Ş.  
Cumhuriyet University Faculty of Science Science Journal, vol.37, pp.521-526, 2016 (Peer-Reviewed Journal)
- XVI. **Determination Of Alpha Decay Energies for  $^{106}\text{Sg}$ ,  $^{107}\text{Bh}$  and  $^{108}\text{Hs}$  Nuclei**  
AKKOYUN S., BAYRAM T.  
Cumhuriyet University Faculty of Science Science Journal, vol.37, pp.120-128, 2016 (Peer-Reviewed Journal)
- XVII. **Relativistic Mean Field Calculations for Ground State Nuclear Properties of Super-heavy Rf ( $Z=104$ ) Isotopes**  
BAYRAM T., AKKOYUN S., ŞENTÜRK Ş., URUK S.  
Cumhuriyet University Faculty of Science Science Journal, vol.36, pp.12-22, 2015 (Peer-Reviewed Journal)
- XVIII. **Süper Ağır Rf  $Z=104$  İzotoplarının Taban Durum Nükleer Özellikleri için Relativistik Ortalama Alan Hesaplamaları**  
BAYRAM T., AKKOYUN S., ŞENTÜRK Ş., SERHAT U.  
Cumhuriyet Science Journal, vol.36, no.7, pp.12-22, 2015 (Peer-Reviewed Journal)
- XIX. **A study on estimation of electric quadrupole transition probability in nuclei**  
AKKOYUN S., BAYRAM T., KARA S. O.

Journal of Nuclear Sciences, vol.2, pp.7-10, 2015 (Peer-Reviewed Journal)

- XX. **Consistent Empirical Physical Formulas for Potential Energy Curves of Ti38-66 Isotopes by Using Neural Networks**  
AKKOYUN S., BAYRAM T., Kara S. O., Yildiz N.  
PHYSICS OF PARTICLES AND NUCLEI LETTERS, vol.10, no.6, pp.528-534, 2013 (ESCI)
- XXI. **Improvement studies on neutron-gamma separation in HPGe detectors by using neural networks**  
AKKOYUN S., BAYRAM T., KARA S. O.  
Cumhuriyet University Faculty of Science Science Journal, vol.34, pp.42-51, 2013 (Peer-Reviewed Journal)
- XXII. **Relativistik Ortalama Alan Modelinde 48Ca, 132Sn ve 208Pb Çekirdeklerinin Tek-parçacık Enerjileri**  
BAYRAM T., YILMAZ A. H.  
Marmara Fen Bilimleri Dergisi, vol.25, pp.16-23, 2013 (Peer-Reviewed Journal)
- XXIII. **Properties of Pseudospin Partners in Deformed 166Gd Nucleus**  
BAYRAM T., YILMAZ A. H.  
Cumhuriyet Faculty of Science Science Journal, vol.33, pp.8-22, 2012 (Peer-Reviewed Journal)
- XXIV. **Ground State Properties of Mo and Ru Isotopes in Skyrme-Hartree-Fock-Bogoliubov Method**  
BAYRAM T., YILMAZ A. H., Engin B., Demirci M.  
Balkan Physics Letters, vol.19, pp.382-391, 2011 (Peer-Reviewed Journal)
- XXV. **Axially Deformed Relativistic Mean Field Calculations on the Properties of Isotopic Chain of Super-heavy Hs Nuclei**  
YILMAZ A. H., BAYRAM T.  
Balkan Physics Letters, vol.19, no.191009, pp.85-94, 2011 (Peer-Reviewed Journal)
- XXVI. **Ground-state Properties of Axially Deformed Sr Isotopes in Skyrme-Hartree-Fock-Bogoliubov Method**  
YILMAZ A. H., BAYRAM T., Demirci M., Engin B.  
Azerbaijan Journal of Physics-Fizika, vol.16, pp.563-566, 2010 (Peer-Reviewed Journal)
- XXVII. **Calculation of Fission Barrier of 230-234Pa Isotopes**  
Yilmaz A. H., Engin B., Bayram T., Demirci M.  
Azerbaijan Journal of Physics, vol.16, pp.520-523, 2010 (Peer-Reviewed Journal)
- XXVIII. **Ground-state Nuclear Properties of Some Rare Earth Nuclei in Relativistic Mean Field Theory**  
YILMAZ A. H., BAYRAM T., Demirci M., Engin B.  
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## Activities in Scientific Journals

Nuclear Science, Committee Member, 2020 - Continues

Journal of Investigations on Engineering and Technology, Committee Member, 2019 - Continues

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## Memberships / Tasks in Scientific Organizations

European Physical Society, Member, 2013 - 2015

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Applied Radiation and Isotopes, SCI Journal, April 2019  
Project Supported by Higher Education Institutions, April 2019  
Modern Physics Letters A, SCI Journal, March 2019  
Progress in Nuclear Energy, SCI Journal, February 2019  
ALKÜ Fen Bilimleri Dergisi, National Scientific Refreed Journal, January 2019  
New Astronomy, SCI Journal, January 2019  
Modern Physics Letters A, SCI Journal, May 2018  
Project Supported by Higher Education Institutions, BAP Other, Akdeniz University, Turkey, February 2018  
Open Physics, SCI Journal, December 2017  
Cumhuriyet Science Journal, Other Indexed Journal, November 2017  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, November 2017  
Project Supported by Higher Education Institutions, November 2017  
Indian Journal of Physics, SCI Journal, October 2017  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, September 2017  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, August 2017  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, July 2017  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, May 2017  
Thermal Science, Other Indexed Journal, March 2017  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, October 2016  
Sinop University Journal of Natural Sciences, National Scientific Refreed Journal, August 2016  
Project Supported by Higher Education Institutions, April 2016  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, March 2016  
Süleyman Demirel Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, March 2016  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, May 2015  
Concepts in Pure and Applied Science, Other Indexed Journal, March 2015  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, November 2014  
International Journal of Electrical Power and Energy Systems, SCI Journal, March 2014  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, January 2014  
Water Air and Pollution, SCI Journal, April 2013  
Water Air and Pollution, Other Indexed Journal, April 2013  
Cumhuriyet University Faculty of Science Science Journal, Other Indexed Journal, April 2013



## Tasks In Event Organizations

Bayram T., New Frontiers in Nuclear Physics and Astrophysics, Scientific Congress, Antalya, Turkey, Eylül 2023

Bayram T., 16th NSP2023 Nuclear Structure Properties, Scientific Congress, Karabük, Turkey, Mayıs 2023

Bayram T., 6th PAK-TÜRK conference , Scientific Congress, Karabük, Turkey, Mayıs 2023

## Scientific Research / Working Group Memberships

Nucpap (Nuclear Physics Application Research Group), Karadeniz Technical University, Turkey,

<https://avesis.ktu.edu.tr/arastirma-grubu/nucpap>, 2022 - Continues

## Metrics

Publication: 149

Citation (WoS): 295

Citation (Scopus): 291

H-Index (WoS): 10

H-Index (Scopus): 10

## Congress and Symposium Activities

5th Pak-Turk International Conference on Emerging Technologies in Field of Science & Engineering, Invited Speaker, Wah Cantonment, Pakistan, 2022

7th Multi Disciplinary Student Research International Conference (MDSRIC), Invited Speaker, Wah Cantonment, Pakistan, 2022

National Nuclear Energy and Nuclear Sciences (UNEB-2021) Seminar, Invited Speaker, Sinop, Turkey, 2021

I. Ulusal Nükleer Enerji ve Nükleer Bilimler (UNEB-2019) Semineri: Nükleer Enerji Teknolojilerinde Yenilikler, Panelists, Sinop, Turkey, 2019

5th International Conference on Engineering and Natural Sciences, Attendee, Praha, Czech Republic, 2019

Nuclear Structure and Dynamics - NSD2019, Attendee, Venice, Italy, 2019

4th International Scientific Research Congress, Attendee, Uppsala, Sweden, 2019

XI. International Conference on Nuclear Structure Properties, Attendee, Trabzon, Turkey, 2018

Sixth International Conference on Radiation and Applications in Various Field of Research, Attendee, Ohrid, Macedonia, 2018

X. International Conference on Nuclear Structure Properties, Attendee, Karabük, Turkey, 2017

Fifth International Conference on Radiation and Applications in Various Field of Research, Attendee, Nish, Serbia And Montenegro, 2017

Nuclear Power Plant Summit, Attendee, İstanbul, Turkey, 2017

Turkey-Ukraine Nuclear Education Cooperation Workshop, Invited Speaker, Ankara, Turkey, 2017

Turkey-Ukraine Nuclear Education Cooperation Workshop, Attendee, Ankara, Turkey, 2017

Dalga ve Parçacık Tipi Radyasyon Etkileşmelerinin Monte Carlo Uygulamaları Kış Okulu, Attendee, Samsun, Turkey, 2017

1st International Underground Resources and Energy Conference, Attendee, Yozgat, Turkey, 2016

IX. International Workshop on Nuclear Structure Properties, Attendee, Sivas, Turkey, 2016

ND 2016 International Conference on Nuclear Data for Science and Technology, Attendee, Brugge, Belgium, 2016

X. International Conference on Luminescence and ESR Dosimetry, Attendee, Adana, Turkey, 2016

XVI. International Balkan Workshop on Applied Physics, Attendee, Constanta, Romania, 2016

Fourth International Conference on Radiation and Applications in Various Field of Research, Attendee, Nish, Serbia And Montenegro, 2016

Theoretical and Experimental Studies in Nuclear Applications and Technology, Attendee, Osmaniye, Turkey, 2015  
Nuclear structure studies using empirical and theoretical ground and excited state properties, Attendee, İstanbul, Turkey, 2014  
VII. International Workshop on Nuclear Structure Properties, Attendee, Turkey, 2014  
Fourth International Conference on Nuclear Fragmentation: From Basic Research to Applications, Attendee, Antalya, Turkey, 2013  
2nd International Conference on Mathematical Modeling in Physical Sciences, Attendee, Praha, Czech Republic, 2013  
VI. International Workshop on Nuclear Structure Properties, Attendee, Karabük, Turkey, 2013  
Fourth Bozok Science Workshop: Studies on Structure and Dynamics from Nucleus to Clusters, Attendee, Yozgat, Turkey, 2013  
27th International Physics Congress of Turkish Physical Society, Attendee, İstanbul, Turkey, 2010  
Summer School V on Nuclear Collective Dynamics, Attendee, İstanbul, Turkey, 2010  
26th International Physics Congress of Turkish Physical Society, Attendee, Muğla, Turkey, 2009  
Summer School IV on Nuclear Collective Dynamics, Attendee, İstanbul, Turkey, 2008

## **Invited Talks**

5th Pak-Turk International Conference on Emerging Technologies in Field of Science & Engineering, Conference, University of Wah, Pakistan, December 2022  
7th Multi Disciplinary Student Research International Conference (MDSRIC), Conference, University of Wah, Pakistan, November 2022  
II. Ulusal Nükleer Enerji ve Nükleer Bilimler (UNEB-2021) Semineri, Seminar, Sinop Üniversitesi, Turkey, May 2021  
I. Ulusal Nükleer Enerji ve Nükleer Bilimler (UNEB-2019) Semineri: Nükleer Enerji Teknolojilerinde Yenilikler, Seminar, Sinop Üniversitesi, Turkey, September 2019  
Turkey-Ukraine Nuclear Education Cooperation Workshop, Workshop, Ankara University, Turkey, February 2017

## **Scholarships**

Scientific Research in Foreign Country, TUBITAK, 2018 - 2019  
Scientific Research for PhD , YOK, 2011 - 2012  
National PhD Scholarship, TUBITAK, 2007 - 2012

## **Non Academic Experience**

Other Public Institution, Turkish Atomic Energy Authority, Nuclear Energy  
Karadeniz Teknik Üniversitesi Farabi Hastanesi  
Özel Olimpiyat Eğitim Kurumları