

## Lect. PhD Özgür AKÇALI

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1999 - 2006

Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Turkey 1996 - 1998

Undergraduate, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, Turkey 1989 - 1996

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Toryum'un hızlı nötronlarla etkileşiminin incelenmesi, Yildiz Technical University, 2006

Postgraduate, Bilgisayar destekli nükleer kuadropol rezonans spektrometrisi, Yildiz Technical University, 1998

### Research Areas

Physics, Nuclear physics, General Nuclear Reactions, Special nuclear reactions, Experimental Methods of Particle and Nuclear Physics, Radioactive decay and in-beam spectroscopy, Natural Sciences

### Academic and Administrative Experience

Deputy Head of Department, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 2015 - 2018

### Courses

Elementary Particles, Undergraduate, 2020 - 2021

Measurement and Detection of Radiation, Undergraduate, 2019 - 2020

### Advising Theses

Akçalı Ö., Katkılı organik sintilasyon dedektörlerinin karakterizasyonu, Postgraduate, İ.ARSLAN(Student), 2019  
Akçalı Ö., Monte Carlo yöntemi kullanılarak organik sintilatör optimizasyonu, Postgraduate, N.ERMİŞ(Student), 2018  
BOZKURT K., AKÇALI Ö., Çevre Örneklerinde Nötron Aktivasyon Yöntemi ile Eser Ağır Metal Ölçümleri, Postgraduate, D.Soya(Student), 2014  
Durusoy A., AKÇALI Ö., C12(p,y)N13 reaksiyonunun tesir kesiti ölçümleri, Postgraduate, M.TAMKAŞ(Student), 2013

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

- I. **Efficiency analysis of multiple detector effects on MCNP 6.2 simulations**  
AKÇALI Ö., TOKER O., Bilmez B., İÇELLİ O.  
Progress in Nuclear Energy, vol.139, 2021 (SCI-Expanded)
- II. **Practical simulation method for determination of effective atomic number from Rayleigh to Compton scattering ratio by MCNP**  
TOKER O., Bilmez B., AKÇALI Ö., Özşahin Toker M., İÇELLİ O.  
Radiation Physics and Chemistry, vol.181, 2021 (SCI-Expanded)
- III. **Evaluation of three different glassy composites (quinary matrix designed using Cr2O3/Na2O/MnO2) in respect of radiation shielding behaviors**  
TOKER O., Bilmez B., Toker M. O., KAVANOZ H. B., AKÇALI Ö., YILMAZ M., İÇELLİ O.  
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.176, no.9-10, pp.967-981, 2021 (SCI-Expanded)
- IV. **An investigation on gamma-ray shielding properties of quaternary glassy composite (Na2Si3O7/Bi2O3/ B2O3/Sb2O3) by BXCUM and MCNP 6.2 code**  
AKÇALI Ö., Çağlar M., TOKER O., Bilmez B., KAVANOZ H. B., İÇELLİ O.  
Progress in Nuclear Energy, vol.125, 2020 (SCI-Expanded)
- V. **Comparison of ITO and ZnO ternary glassy composites in terms of radiation shielding properties by Monte Carlo N-particle transport code and BXCUM**  
TOKER O., Bilmez B., KAVANOZ H. B., AKÇALI Ö., İÇELLİ O.  
RADIATION AND ENVIRONMENTAL BIOPHYSICS, vol.59, no.2, pp.283-293, 2020 (SCI-Expanded)
- VI. **A novel comprehensive utilization of vanadium slag/epoxy resin/antimony trioxide ternary composite as gamma ray shielding material by MCNP 6.2 and BXCUM**  
Kavanoz H. B., Akçalı Ö., Toker O., Bilmez B., Çağlar M., İçelli O.  
Radiation Physics and Chemistry, vol.165, 2019 (SCI-Expanded)
- VII. **Cu-65 isomeric cross sections for (n,alpha) reaction using approximately 14 MeV neutrons**  
Durusoy A., Reyhancan İ. A., Akçalı Ö.  
APPLIED RADIATION AND ISOTOPES, vol.99, pp.86-89, 2015 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **COMPARATIVE ANALYSIS OF EXPERIMENTAL AND SIMULATED X-RAY FLUORESCENCE SPECTRA OF STAINLESS STEELS**  
Keskin U., Özşahin Toker M., TOKER O., AKÇALI Ö., İÇELLİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023
- II. **XRF SPECTROSCOPY ANALYSIS OF CEMENT VIA MCNP SIMULATIONS**  
Yavaş K., TOKER O., Özşahin Toker M., AKÇALI Ö., İÇELLİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023
- III. **COMPARISON OF COMPOSITE AND MULTILAYERED SHIELDING MATERIALS ON MCNP SIMULATIONS**  
Yavaş K., TOKER O., Özşahin Toker M., AKÇALI Ö., İÇELLİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04

September 2023

- IV. **TUMOUR VOLUME ESTIMATION WITH ARTIFICIAL INTELLIGENCE AND OPTIMUM RADIATION APPLICATION**  
Kemal Z., TOKER O., AKÇALI Ö., İÇELLİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023
- V. **INPGEN – A SUPPORTIVE SOFTWARE FOR MONTE CARLO N PARTICLE SIMULATIONS**  
Eminoğlu H. F., TOKER O., AKÇALI Ö., İÇELLİ O.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023
- VI. **Charged Particle Detection with PPO Doped Polystyrene Film**  
Az E., Koç K., Akçalı Ö., Kaya M. A.  
HEZARFEN Uluslararası Fen Matematik ve Mühendislik Bilimleri Kongresi, İzmir, Turkey, 8 - 10 November 2019, pp.150
- VII. **An investigation of ternary composites as gamma ray shielding material by Monte Carlo simulation and BXCUM**  
KAVANOZ H. B., AKÇALI Ö., TOKER O., BİLMEZ B., YILMAZ M., ÇAĞLAR M., İÇELLİ O.  
Eighth Bozok Science Workshop, Yozgat, Turkey, 25 - 27 July 2019
- VIII. **A Monte Carlo Simulation Study of Na<sub>2</sub>Si<sub>3</sub>O<sub>7</sub> / Bi<sub>2</sub>O<sub>3</sub> / B<sub>2</sub>O<sub>3</sub> /Sb<sub>2</sub>O<sub>3</sub> quaternary glassy composites for radiation shielding**  
AKÇALI Ö., KAVANOZ H. B., TOKER O., BİLMEZ B., ÇAĞLAR M., YILMAZ M., İÇELLİ O.  
Eighth Bozok Workshop, Yozgat, Turkey, 25 - 27 July 2019
- IX. **Optical Properties of TiO<sub>2</sub> and TiO<sub>2</sub>/MPS-Capped CdS Quantum Dots Mixture Thin Films: Influence of Heat Treatment**  
AKÇALI Ö., KOÇ K., AZ E.  
International Conference on Sustainable Energy and Energy Calculations (ICSEEC), Muğla, Turkey, 12 April 2019, pp.46
- X. **Investigation of Possible Radioactivity in Aerosol Samples in Istanbul**  
KUZU S. L., AKÇALI Ö., SARAL A.  
ATMOS 2017, 8th Atmospheric Sciences Symposium, İstanbul, Turkey, 1 - 04 November 2017, vol.1, pp.752-754
- XI. **Fundamental Sciences Demand and Reality**  
AKÇALI Ö., BİLEN Ö.  
Xth International Statistics Days Conference, 7 - 09 October 2016
- XII. **PRODUCTION OF DOPED ORGANIC SCINTILLATORS**  
ARSLAN İ., KAYA M. A., AKÇALI Ö.  
TFD 32, Muğla, Turkey, 06 September 2016, vol.1, no.1, pp.385
- XIII. **EDUCATIONAL DATA MINING ON FRESHMAN PHYSICS COURSES**  
AKÇALI Ö., BİLEN Ö.  
TFD 32, 6 - 09 September 2016
- XIV. **Investigation of Potential to Produce Electricity from Commercial Solar Cell Through Beta Particles**  
AYARCI KURUOĞLU N., BOZKURT K., ÖZDEMİR O., MENDA U. D., AKÇALI Ö., KUTLU K.  
APMAS 2013, Antalya, Turkey, 15 April 2013
- XV. **CAMAC based multi spectrum scaling software for yield and half-life measurements**  
Akcali Ö.  
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.89-90

## Supported Projects

YETKİN T., HÜDAVERDİ M., İŞILDAK B., AKÇALI Ö., Project Supported by Higher Education Institutions, CERN CMS

Deneyinde Jet Fiziği Analizleri ve HGAL Dedektör Ar-Ge Çalışmaları, 2023 - 2024

AKÇALI Ö., Project Supported by Higher Education Institutions, KATKILI ORGANİK SINTILASYON DEDEKTÖRLERİNİN KARAKTERİZASYONU, 2016 - 2022

Yetkin T., Bozkurt K., Durusoy A., Akçalı Ö., Erduran M. N., Özok F., Zengin A. T., Akbeniz Ş., TUBITAK Project, Gama Kamerası Modernizasyonu İçin Yöntem Geliştirilmesi ve Deneysel Uygulaması, 2017 - 2019

Akçalı Ö., Saral A., Project Supported by Higher Education Institutions, Yıldız Teknik Üniversitesi Davutpaşa Kampusünün Hava Kalitesinin Çevredeki Sanayi Tesislerinden Etkilenme Potansiyelinin PM ve PM ile Taşınabilen Ağır Metaller Bazında Araştırılması ve Potansiyel Radyoaktif Kirliliğin İncelenmesi, 2010 - 2014

Akçalı Ö., Subaşı M., Karasu Uysal A., Project Supported by Other Official Institutions, Avrupa Nükleer Araştırma Merkezi CERN Büyük Hadron Çarpıştırıcısı LHC Deneylerinden ALICE'xxde 14 TeV Kutle Merkezi Enerjili Proton-Proton Çarpışmalarında Acayip Parçacık Üretiminin İncelenmesi, 2007 - 2010

Akçalı Ö., Başaran R., Project Supported by Higher Education Institutions, Klor İçindeki Asetik Asit Bileşiklerinin Nükleer Kuadrupol Rezonans Tekniği ile İncelenmesi, 1997 - 1998

## Tasks In Event Organizations

Denkdaş C., AKÇALI Ö., International 2nd Conference on Sustainable Energy and Energy Calculations, Scientific Congress, Turkey, Eylül 2020

Akçalı Ö., Denkdaş C., INTERNATIONAL CONFERENCE ON SUSTAINABLE ENERGY AND ENERGY CALCULATIONS, Scientific Congress, Muğla, Turkey, Nisan 2019

## Metrics

Publication: 22

Citation (WoS): 34

Citation (Scopus): 93

H-Index (WoS): 2

H-Index (Scopus): 5