

## Assoc. Prof. SİBEL AKÇA ÖZALP

### Personal Information

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### International Researcher IDs

ScholarID: ZLBnexQAAAAJ

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ScopusID: 55650676600

Yoksis Researcher ID: 102780

### Education

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2011 - 2018

Postgraduate, Kahramanmaraş Sutcu Imam University, Institute Of Science, Fizik, Turkey 2010 - 2011

Undergraduate, Balıkesir University, Necatibey Faculty Of Education, Fizik Öğretmenliği, Turkey 2002 - 2007

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Yarı-deneysel (?n) Reaksiyon Tesir Kesiti Formüllerinin Önerilmesi ve Nükleer Data Değerlendirmesi, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, 2018

Postgraduate, MANTAR ÇEŞİTLERİNDE ELEMENTAL ANALİZ VE DOĞAL RADYOAKTİVİTE ÖLÇÜMÜ , Cukurova University, Fen Bilimleri Enstitüsü, Fizik, 2011

### Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Nuclear physics, Nuclear Structure, Nuclear Engineering and Nuclear Energy Studies, Special nuclear reactions, Natural Sciences

### Academic Positions

Associate Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2022 - Continues

Associate Professor, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2021 - 2022

Research Assistant PhD, Cukurova University, Fen-Edebiyat Fakültesi, Fizik, 2018 - 2022

Research Assistant, Cukurova University, Fen Bilimleri Enstitüsü, Fizik, 2011 - 2018

Research Assistant, Universität Karlsruhe, Institut Für Neutronenphysik Und Reaktortechnik, Nuclear Data, 2013 - 2014

Research Assistant, Kahramanmaraş Sutcu Imam University, Institute Of Science, Fizik, 2010 - 2011

## Courses

### Undergraduate

Radyasyon ve Uygulama Alanları, Undergraduate, 2020 - 2021

Radyasyon ve Uygulama Alanları, Undergraduate, 2019 - 2020

Radyasyon ve Tıbbi Görüntüleme, Undergraduate, 2017 - 2018

### Journal articles indexed in SCI, SSCI, and AHCI

- I. **Enhanced photoluminescence properties of Eu<sup>3+</sup>/Li<sup>+</sup> co-doped ZrO<sub>2</sub>: A focus on red and far-red emissions**  
Altowyan A. S., Kaynar U., Aydin H., Coban M., PORTAKAL Z. G., AKÇA ÖZALP S., Hakami J., Ayvacikli M., TOPAKSU M., Can N.  
Journal of Photochemistry and Photobiology A: Chemistry, vol.466, 2025 (SCI-Expanded)
- II. **Thermoluminescence study of Nd<sup>3+</sup> doped lanthanum tri-borate phosphor**  
Oglakci M., AKÇA ÖZALP S., PORTAKAL UÇAR Z. G., Correcher V., Benavente J., Sonsuz M., Can N., HALEFOĞLU Y. Z., TOPAKSU M.  
Journal of Alloys and Compounds, vol.1013, 2025 (SCI-Expanded)
- III. **Beta-irradiated ZnGa<sub>2</sub>O<sub>4</sub>:Sm<sup>3+</sup> phosphor: Thermoluminescence glow curves and kinetic parameters via gel combustion synthesis**  
Barad A., TOPAKSU M., Hakami J., Kaynar U., AKÇA ÖZALP S., Altowyan A. S., Aydin H., Can N.  
Journal of Alloys and Compounds, vol.1002, 2024 (SCI-Expanded)
- IV. **Beta irradiation-induced thermoluminescence: Glow curve analysis and kinetic parameters in combustion-synthesized undoped Ca<sub>4</sub>YO(BO<sub>3</sub>)<sub>3</sub>**  
Madkhli A., Jabali D., Souadi G., Sonsuz M., Kaynar U., AKÇA ÖZALP S., Ayvacikli M., Madkhali O., TOPAKSU M., Can N.  
Applied Radiation and Isotopes, vol.208, 2024 (SCI-Expanded)
- V. **Assessment of structural and thermoluminescence characteristics of porcelain used as an electrical insulator**  
Portakal Uçar Z. G., Akça Özalp S., Oğlakçı M., Barad A., Topaksu M.  
AMERICAN CERAMIC SOCIETY, JOURNAL, vol.107, no.1, pp.640-658, 2024 (SCI-Expanded)
- VI. **Thermoluminescence behavior of Ce<sup>3+</sup> doped lanthanum tri-borate phosphor for dosimetry applications**  
Oğlakçı M., Portakal Uçar Z. G., Akça Özalp S., Correcher V., Benavente J. F., Sonsuz M., Can N., Halefoğlu Y. Z., Topaksu M.  
CERAMICS INTERNATIONAL, vol.49, no.22PB, pp.36092-36102, 2023 (SCI-Expanded)
- VII. **Unravelling the impact of unusual heating rate, dose-response and trap parameters on the thermoluminescence of Sm<sup>3+</sup> activated GdAl<sub>3</sub>(BO<sub>3</sub>)<sub>4</sub> phosphors exposed to beta particle irradiation**  
Souadi G., Kaynar Ü. H., Sonsuz M., Akça Özalp S., Ayvacıklı M., Topaksu M., Özmen Ö., Can N.  
RADIATION PHYSICS AND CHEMISTRY, vol.213, pp.111211, 2023 (SCI-Expanded)
- VIII. **Synthesis and beta particle excited thermoluminescence of BaSiF<sub>6</sub> phosphor**  
Souadi G., AKÇA ÖZALP S., Karali E. E., Kaynar U. H., Ayvacikli M., Topaksu M., Can N.  
APPLIED RADIATION AND ISOTOPES, vol.181, 2022 (SCI-Expanded)
- IX. **Characterization of thermoluminescence kinetic parameters of dolomite after exposure to  $\beta$ -radiation dose**  
Akça Özalp S., Portakal Uçar Z. G., Oğlakçı M., Yüksel M., Halefoğlu Y. Z., Topaksu M.  
JOURNAL OF LUMINESCENCE, vol.240, pp.118427, 2021 (SCI-Expanded)
- X. **Thermoluminescence of Ce and Nd co-doped CaF<sub>2</sub> phosphors after beta irradiation**  
Yazan H., Portakal Uçar Z. G., Akça Özalp S., Topaksu M., Townsend P., Can N.  
JOURNAL OF LUMINESCENCE, vol.234, pp.117949, 2021 (SCI-Expanded)
- XI. **Effect of Sm<sup>3+</sup> and Mn<sup>2+</sup> incorporation on the structure and luminescence characteristics of**

## **Zn<sub>2</sub>SiO<sub>4</sub> phosphor**

Portakal Uçar Z. G., Doğan T., Akça Özalp S., Kaynar Ü. H., Topaksu M.

RADIATION PHYSICS AND CHEMISTRY, vol.181, pp.109329, 2021 (SCI-Expanded)

- XII. **Enhancing the blue luminescence behaviour of the Li co -doped novel phosphor ZnB<sub>2</sub>O<sub>4</sub>:Tm<sup>3+</sup>**  
Küçük N., Kaynar U. H., Akça S., Alajlani Y., Yin L., Wang Y., Garcia Guinea J., Bulcar K., Doğan T., Karabulut Y., et al.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.838, 2020 (SCI-Expanded)
- XIII. **Synthesis and photoluminescence characteristics of Dy incorporated MoO<sub>3</sub> phosphor: Suppression concentration quenching**  
Ayvacikli M., Kaynar U. H., Karabulut Y., Canimoglu A., Bakr M., Akca S., Can N.  
APPLIED RADIATION AND ISOTOPES, vol.164, 2020 (SCI-Expanded)
- XIV. **Thermoluminescence of beta-particle induced Bern-4M muscovite**  
Portakal-Uçar Z. G., Akça S., Balci-Yegen S., Yüksel M., Doğan T., Souadi G., Parlak O., Topaksu M., Can N.  
RADIATION PHYSICS AND CHEMISTRY, vol.174, 2020 (SCI-Expanded)
- XV. **Determination of thermoluminescence properties of ZnB<sub>2</sub>O<sub>4</sub>:Tm<sup>3+</sup>,Li<sup>+</sup> for dosimetric purposes**  
AKÇA S.  
APPLIED RADIATION AND ISOTOPES, vol.157, 2020 (SCI-Expanded)
- XVI. **A study on thermoluminescence behaviour of Eu doped LaB<sub>3</sub>O<sub>6</sub> irradiated with beta particles**  
Halefoglul Y. Z., Oglakci M., Portakal Z. G., Akca S., Souadi G. O., Canimoglu A., Topaksu M., Can N.  
Radiation Physics and Chemistry, vol.168, 2020 (SCI-Expanded)
- XVII. **Eu<sup>3+</sup> and Dy<sup>3+</sup> doped La<sub>2</sub>MoO<sub>6</sub> and La<sub>2</sub>Mo<sub>2</sub>O<sub>9</sub> phosphors: Synthesis and luminescence properties**  
Kaynar U. H., Kaynar S. C., Alajlani Y., Ayvacikli M., Karali E., Karabulut Y., Akca S., Karali T., Can N.  
MATERIALS RESEARCH BULLETIN, vol.123, 2020 (SCI-Expanded)
- XVIII. **Comprehensive study of photoluminescence and cathodoluminescence of Eu and Tb doped Mg<sub>2</sub>SiO<sub>4</sub> prepared via a solid-state reaction technique**  
Ucar Z. G. P., Akca S., Dogan T., Halefoglul Y. Z., Kaynar U. H., Ayvacikli M., Garcia Guinea J., Topaksu M., Can N.  
OPTICAL MATERIALS, vol.100, 2020 (SCI-Expanded)
- XIX. **Thermoluminescence properties of Tb doped Mg<sub>2</sub>SiO<sub>4</sub> after beta irradiation**  
AKÇA S., Portakal Z. G., DOĞAN T., Kucuk N., Canimoğlu A., TOPAKSU M., Can N.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.458, pp.12-20, 2019 (SCI-Expanded)
- XX. **Comparative studies on thermoluminescence characteristics of non-doped Mg<sub>2</sub>SiO<sub>4</sub> prepared via a solid-state reaction technique and wet-chemical method: An unusual heating rate dependence**  
Doğan T., Akça S., Yüksel M., Kucuk N., Ayvacikli M., Karabulut Y., Canimoğlu A., Topaksu M., Can N.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.795, pp.261-268, 2019 (SCI-Expanded)
- XXI. **Thermoluminescence analysis of beta irradiated ZnB<sub>2</sub>O<sub>4</sub>: Pr<sup>3+</sup> phosphors synthesized by a wet-chemical method**  
Akca S., Oğlakçı M., Portakal Z. G., Kucuk N., Bakr M., Topaksu M., Can N.  
RADIATION PHYSICS AND CHEMISTRY, vol.160, pp.105-111, 2019 (SCI-Expanded)
- XXII. **Characterization and thermoluminescence behavior of beta irradiated NaBaBO<sub>3</sub> phosphor synthesized by combustion method**  
Oğlakçı M., Akça S., Halefoğlu Y. Z., Doğan T., Ayvacikli M., Karabulut Y., Topaksu M., Can N.  
CERAMICS INTERNATIONAL, vol.45, pp.7011-7017, 2019 (SCI-Expanded)
- XXIII. **Cathodoluminescence and thermoluminescence of ZnB<sub>2</sub>O<sub>4</sub>:Eu<sup>3+</sup> phosphors prepared via wet-chemical synthesis**  
DOĞAN T., Tormo L., AKÇA S., Kucuk N., Garcia Guinea J., Karabulut Y., Ayvacikli M., Oglakci M., TOPAKSU M., Can N.  
CERAMICS INTERNATIONAL, vol.45, no.4, pp.4918-4925, 2019 (SCI-Expanded)
- XXIV. **UV effect on the cathodo- and thermoluminescence properties of a gem-quality Cr-rich diaspore (alpha-AlOOH)**  
TOPAKSU M., Correcher V., Boronat C., Garcia-Guinea J., Portakal Z. G., AKÇA S.  
APPLIED RADIATION AND ISOTOPES, vol.141, pp.101-106, 2018 (SCI-Expanded)
- XXV. **Heating rate properties and kinetic parameters of thermoluminescence glow curves of La-doped zinc**

## borate

Yüksel M., Doğan T., Balci-Yegen S., Akça S., Portakal Z. G., Kucuk N., Topaksu M.  
RADIATION PHYSICS AND CHEMISTRY, vol.151, pp.149-155, 2018 (SCI-Expanded)

- XXVI. **Thermoluminescence behavior of Sm<sup>3+</sup> activated ZnB<sub>2</sub>O<sub>4</sub> phosphors synthesized using low temperature chemical synthesis method**  
Bulcar K., Doğan T., Akça S., Yüksel M., Ayvacikli M., Karabulut Y., Kucuk N., Canımoglu A., Can N., Topaksu M.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.428, pp.65-71, 2018 (SCI-Expanded)
- XXVII. **Luminescence studies of zinc borates activated with different concentrations of Ce and La under x-ray and electron excitation**  
Kucuk N., Ayvacikli M., Akça S., Yüksel M., Garcia Guinea J., Karabulut Y., Canımoglu A., Topaksu M., Can N.  
APPLIED RADIATION AND ISOTOPES, vol.127, pp.35-40, 2017 (SCI-Expanded)
- XXVIII. **Normal and anomalous heating rate effects on thermoluminescence of Ce-doped ZnB<sub>2</sub>O<sub>4</sub>**  
DOĞAN T., YÜKSEL M., AKÇA S., PORTAKAL Z. G., BALCI YEGEN S., KÜÇÜK N., TOPAKSU M.  
APPLIED RADIATION AND ISOTOPES, vol.128, pp.256-262, 2017 (SCI-Expanded)
- XXIX. **Thermoluminescence properties of annealed natural quartz after beta irradiation**  
Yüksel M., Doğan T., Unsal E., Portakal Z. G., Akça S., Yeğingil Z., Topaksu M.  
LUMINESCENCE, vol.31, no.8, pp.1513-1518, 2016 (SCI-Expanded)
- XXX. **The Comparison of (n,p), (n,α), (n,2n) and (α,n) Reaction Cross-Sections for <sup>7</sup>Li and <sup>9</sup>Be Target Nuclei**  
TEL E., AKÇA S., SAHAN M., DEPEDELEN M., Sarpun I.  
Journal of Fusion Energy, vol.35, no.4, pp.709-714, 2016 (SCI-Expanded)
- XXXI. **Semi-Empirical Formula with New Coefficients of the (α,n) Reaction Cross-Section**  
AKÇA S., TEL E., GÜNGÖR S.  
ACTA PHYSICA POLONICA A, vol.128, 2015 (SCI-Expanded)
- XXXII. **Calculations of Double-Differential Neutron Emission Cross Sections for <sup>9</sup>Be Target Nucleus at 14.2 MeV Neutron Energy**  
SAHAN M., TEL E., ŞAHAN H., Kara A., Aydın A., KAPLAN A., Sarpun I., DEMİR B., AKÇA S., Yildiz E.  
Journal of Fusion Energy, vol.34, no.3, pp.493-499, 2015 (SCI-Expanded)
- XXXIII. **Radioactivity levels in some mushroom species and consequent doses**  
Akça S., Söğüt O., Küçükönder E., Karatepe S., Dogru M.  
Asian Journal of Chemistry, vol.26, no.3, pp.879-882, 2014 (SCI-Expanded)
- XXXIV. **Evaluated gas production cross-section data for natural titanium irradiated with protons at energies up to 3 GeV**  
AKÇA S., Konobeyev A., Fischer U.  
Kerntechnik, vol.79, no.6, pp.467-472, 2014 (SCI-Expanded)
- XXXV. **Calculation of excitation functions for the production of Cu and Co medical isotopes**  
AKÇA S., TEL E., KARA A.  
Kerntechnik, vol.78, no.6, pp.484-488, 2013 (SCI-Expanded)
- XXXVI. **(p,α) reaction cross sections calculations of Fe and Ni target nuclei using new developed semi-empirical formula**  
TEL E., AKÇA S., KARA A., Yiğit M., Aydın A.  
Journal of Fusion Energy, vol.32, no.5, pp.531-535, 2013 (SCI-Expanded)

## Articles Published in Other Journals

1. **YBO<sub>3</sub> Fosforunun Termoluminesans Dozimetrik Pikinin Kinetik Parametreleri**  
Akça S.  
Süleyman Demirel Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi, vol.15, no.1, pp.100-109, 2020 (Peer-Reviewed Journal)

- II. **3 GeV'e kadar enerjiye sahip protonlarla ışınlanan kurşun hedefi için p,d,t, 3He, ve 4He üretim tesir kesitlerinin değerlendirilmesi**  
AKÇA S., Konobeyev A. Y., Fischer U.  
Cumhuriyet Üniversitesi Fen Fakültesi Fen Bilimleri Dergisi (CFD), vol.35, pp.53-64, 2014 (Peer-Reviewed Journal)

## Books

### I. Adli Fizik

Sayın Ü., Topaksu M., Portakal Uçar Z. G., Avcı H., Akça Özalp S., Ece E.  
in: Adli Bilimler ve Kriminalistik Ansiklopedisi Cilt 8 - Adli Temel Bilimler Adli Doğa Bilimleri, İ. Hamit HANCI, Oğün VURAL, Editor, Adalet Yayınevi, Ankara, pp.3969-3996, 2023

## Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Variation of thermoluminescence behavior of doped (Nd<sup>3+</sup> and Eu<sup>3+</sup>) yttrium borate phosphor produced by a combustion process**  
AKÇA ÖZALP S., PORTAKAL UÇAR Z. G., HALEFOĞLU Y. Z., TOPAKSU M.  
International Conference on Sensor, Detector, Material Sciences and Technologies, Bolu, Turkey, 5 - 07 October 2023, pp.12-16, (Full Text)
- II. **Thermoluminescence behavior of YBO<sub>3</sub> synthesized by combustion reaction versus beta radiation**  
Akça S.  
3. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology (IMSMATEC-2020), Nevşehir, Turkey, 24 - 26 June 2020, pp.377, (Summary Text)
- III. **A Study on TL Properties of Natural Dolomite Mineral Irradiated with Beta Particles**  
Akça S.  
TURKISH PHYSICAL SOCIETY 35th INTERNATIONAL PHYSICS CONGRESS (TPS35), Muğla, Turkey, 4 - 08 September 2019, vol.01, no.9, pp.482-490, (Full Text)
- IV. **TL Analyses on Filter Test Results of Synthesized Un-Doped And Doped Zn<sub>2</sub>SiO<sub>4</sub> Phosphors for Dosimetry Purposes**  
PORTAKAL Z. G., AKÇA S., oğlakçı m., KAYNAR Ü. H., AYVACIKLI M., YÜKSEL M., DOĞAN T., TOPAKSU M., can N.  
2. ULUSLARARASI GAP MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Adıyaman, Turkey, 21 - 23 June 2019, pp.37-45, (Full Text)
- V. **TL Analyses on Filter Test Results of Synthesized Un-Doped and Doped Zn<sub>2</sub>SiO<sub>4</sub> Phosphors for Dosimetry Purpose**  
Portakal Z. G., Akça S., Oğlakçı M., Kaynar Ü. H., Ayvacıklı M., Yüksel M., Doğan T., Topaksu M., Can N.  
2. ULUSLARARASI GAP MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Adıyaman, Turkey, 21 - 23 June 2019, pp.37-45, (Full Text)
- VI. **TL Analyses on Filter Test Results of Synthesized Un-Doped and Doped Zn<sub>2</sub>SiO<sub>4</sub> Phosphors for Dosimetry Purposes**  
Portakal Z. G., Akça S., Oğlakçı M., Kaynar Ü. H., Ayvacıklı M., Yüksel M., Doğan T., Topaksu M., Can N.  
2. ULUSLARARASI GAP MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Adıyaman, Turkey, 21 - 23 June 2019, pp.9-10, (Summary Text)
- VII. **A Study on the Correction of the Trap Depth Value for Low Temperature TL Peak of Quartz**  
Yüksel M., Portakal Uçar Z. G., Akça S., Topaksu M.  
3rd International Symposium on Innovative Approaches in Scientific Studies, Ankara, Turkey, 19 - 21 April 2019, vol.4, no.1, pp.351-353, (Full Text)
- VIII. **Thermoluminescence properties of Sm<sup>3+</sup> doped ZnB<sub>2</sub>O<sub>4</sub> phosphors synthesized by low temperature chemical synthesis method**  
Bulcar K., Doğan T., Akça S., Yüksel M., Ayvacıklı M., Karabulut Y., Küçük N., Canımoğlu A., Can N., Topaksu M.

11th International Conference On Luminescence And ESR Dosimetry (LumiDoz-11), Gaziantep, Turkey, 5 - 07 September 2018, pp.36, (Summary Text)

- IX. **Natural Radioactivity Study of Soil Samples from Some Villages in Mersin**  
Yüksel M., Doğan T., Kocakoç M., Akça S., Portakal Z. G., Topaksu M.  
11th International Conference On Luminescence And ESR Dosimetry (LumiDoz-11), Gaziantep, Turkey, 5 - 07 September 2018, pp.39, (Summary Text)
- X. **Evaluated displacement and gas production cross-sections for materials irradiated with intermediate energy nucleons**  
Konobeyev A. Y., Fischer U., Pereslavytsev P. E., Simakov S. P., Akça S.  
2016 International Conference on Nuclear Data for Science and Technology, ND 2016, Bruges, Belgium, 11 - 16 September 2016, vol.146, (Full Text)
- XI. **Evaluated P,D,T,3HE, and 4HE production cross-section data for natti irradiated neutrons at energies up to 3 GeV**  
AKÇA S., Konobeyev A. Y., Fischer U., TOPAKSU M., TEL E.  
Turkish Physical Society 33rd International Physics Congress, 6 - 10 September 2017, (Summary Text)
- XII. **Evaluated p, d, t, 3He, and 4He production cross-section data for natTi irradiated with neutrons at energies up to 3 GeV**  
Akça S., Konobeyev A. Y., Fischer U., Topaksu M., Tel E.  
Turkish Physical Society 33th International Physics Congress(TPS33), Muğla, Turkey, 6 - 10 September 2017, pp.448, (Summary Text)
- XIII. **Calculation of Activation Energy Using VHR Method for Low Temperature Peak of Gypsum Mineral**  
DOĞAN T., YÜKSEL M., PORTAKAL Z. G., BALCI YEGEN S., AKÇA S., TOPAKSU M.  
RAD 2017 Fifth International Conference on Radiation and Applications in Various Fields of Research, Budva, Montenegro, 12 - 16 June 2017, vol.5, pp.235, (Summary Text)
- XIV. **Thermoluminescence (TL) Dose Response Characteristics and Resusability Properties of Natural Muscovite Mineral**  
BALCI YEGEN S., AKÇA S., PORTAKAL Z. G., YÜKSEL M., DOĞAN T., PARLAK O., TOPAKSU M.  
RAD 2017 Fifth International Conference on Radiation and Applications in Various Fields of Research, Budva, Montenegro, 12 - 16 June 2017, vol.5, pp.177, (Summary Text)
- XV. **Calculation of Activation Energy using various heating rate method for low temperature peak of gypsum mineral**  
DOĞAN T., YÜKSEL M., PORTAKAL Z. G., BALCI YEGEN S., AKÇA S., TOPAKSU M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), 12 - 16 June 2017, (Summary Text)
- XVI. **The Analysis of TL Kinetic Parameters of Apatite with CGCD method**  
TOPAKSU M., YÜKSEL M., DOĞAN T., Karaman T., BALCI YEGEN S., AKÇA S., PORTAKAL Z. G.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), 12 - 16 June 2017, (Summary Text)
- XVII. **Investigations of Thermoluminescence Dose Response Characteristics and Reusability Properties of Muscovite Mineral**  
BALCI YEGEN S., AKÇA S., PORTAKAL Z. G., YÜKSEL M., DOĞAN T., PARLAK O., TOPAKSU M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), 12 - 16 June 2017, (Summary Text)
- XVIII. **A Preliminary Study of TL and OSL Traps for the Aragonite Mineral**  
Yüksel M., Doğan T., Portakal Z. G., Balcı Yegen S., Akça S., Topaksu M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Podgorica, Serbia And Montenegro, 12 - 16 June 2017, pp.262, (Summary Text)
- XIX. **The Effects of Annealing on the Thermoluminescence Glow Peaks of Natural Muscovite Mineral**  
Akça S., Portakal Z. G., Balcı Yegen S., Yüksel M., Doğan T., Parlak O., Topaksu M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Podgorica, Serbia And Montenegro, 12 - 16 June 2017, pp.261, (Summary Text)

- XX. **Determination of Gamma-Emitting Radionuclides in Pistachio Samples from Southeastern Anatolia Region Turkey**  
Portakal Z. G., Yüksel M., Doğan T., Balcı Yegen S., Akça S., Goren E., Uğur F. A., Topaksu M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Podgorica, Serbia And Montenegro, 12 - 16 June 2017, pp.409, (Summary Text)
- XXI. **Calculation of activation energy using various heating rate method for low temperature peak of gypsum mineral**  
Doğan T., Yüksel M., Portakal Z. G., Balcı Yegen S., Akça S., Topaksu M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Podgorica, Serbia And Montenegro, 12 - 16 June 2017, pp.232, (Summary Text)
- XXII. **Thermoluminescence Dose Response Characteristics and Reusability Properties of Natural Muscovite Mineral**  
BALCI YEGEN S., AKÇA S., PORTAKAL Z. G., YÜKSEL M., DOĞAN T., PARLAK O., TOPAKSU M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Budva, Montenegro, 12 - 16 June 2017, pp.177, (Summary Text)
- XXIII. **A Preliminary Study of TL and OSL Traps for Aragonite mineral**  
YÜKSEL M., DOĞAN T., PORTAKAL UÇAR Z. G., BALCI YEGEN S., AKÇA S., TOPAKSU M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Budva, Montenegro, 12 - 16 June 2017, pp.262, (Summary Text)
- XXIV. **Thermoluminescence (TL) Dose Response Characteristics and Reusability Properties of Muscovite Mineral**  
Balcı Yegen S., Akça S., Portakal Z. G., Yüksel M., Doğan T., Parlak O., Topaksu M.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Podgorica, Serbia And Montenegro, 12 - 16 June 2017, pp.177, (Summary Text)
- XXV. **Analysis of Thermoluminescence Kinetic Parameters of Apatite with CGCD Method**  
Topaksu M., Yüksel M., Doğan T., Karaman T., Balcı Yegen S., Akça S., Portakal Z. G.  
Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Podgorica, Serbia And Montenegro, 12 - 16 June 2017, pp.263, (Summary Text)
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- XXVIII. **Measurements of radioactivity levels in soil samples from southeastern Anatolia region**  
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- XXXI. **Influence of Sintering Time on the Thermoluminescence Characteristics of Eu<sup>3+</sup> doped CaO obtained from Sea-Urchin Skeleton: A Preliminary Study**

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- XXXII. **The effect of Eu dopant amount on the Characteristics of Thermoluminescence of Eu<sup>3+</sup> doped CaO obtained from Sea Urchin Skeleton.**  
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- XXXIII. **Preliminary results on OSL dose response of serpentine mineral from Kızıldağ plateau in Karaisalı, Turkey**  
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- XXXIV. **51V, 59Co, 62Ni, 93Nb ve 107,109Ag yapısal malzemeleri için ( $\alpha$ ,n) reaksiyon tesir kesitlerinin hesaplanması**  
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XI. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, Kuşadası, Aydın, Turkey, 12 - 14 October 2016, pp.146, (Summary Text)
- XXXV. **Evaluated displacement and gas production cross-sections for materials irradiated with intermediate energy nucleons**  
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- XXXVI. **Preliminary Results on Dose Response of Serpentinite Mineral**  
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- XXXVII. **The cross-section calculations of neutron emission of alpha induced on 63Cu, 64,66,68Zn, 92,94Mo and 114Cd**  
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- XL. **EQUILIBRIUM AND PRE-EQUILIBRIUM CROSS-SECTION CALCULATIONS FOR SOME TARGET NUCLEI IRRADIATED WITH ALPHA**  
Akça S., Tel E., Topaksu M.  
The 9th International Conference on Luminescence and ESR Dosimetry (LUMIDOZ9), Antalya, Turkey, 2 - 04 September 2015, pp.70, (Summary Text)
- XLI. **Improvement of the Semi-Empirical Nuclear Reaction Cross-Sections in Magic Nuclei**  
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- XLII. **Investigation of the Semi-Empirical Nuclear Reaction Cross Sections for Deformed Nuclei**  
Buyun S., Akça S., Tel E., Aydın A., Şahan H.

- International Workshop on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT-2015), Osmaniye, Turkey, 23 - 26 April 2015, pp.110, (Summary Text)
- XLIII. **Comparison of Semi-Empirical ( $\sigma$ ,n) Reaction Cross Sections with Nuclear Model Calculation Results**  
Akça S., Tel E., Güngör S.  
International Workshop on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT-2015), Osmaniye, Turkey, 23 - 26 April 2015, pp.37, (Summary Text)
- XLIV. **Evaluation of p, d, t,  $^3\text{He}$ , and  $^4\text{He}$  production cross-sections for lead irradiated with protons at energies up to 3 GeV**  
Akça S., Konobeyev A. Y., Fischer U.  
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- XLV. **Semi-empirical Formula with new coefficients of ( $\sigma$ , n) reaction cross-section**  
Akça S., Tel E.  
International Conference on Computational and Experimental Science and Engineering (ICCESEN-2014), Antalya, Turkey, 25 - 29 October 2014, pp.81, (Summary Text)
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TURKISH PHYSICAL SOCIETY 31st INTERNATIONAL PHYSICS CONGRESS (TPS31), Muğla, Turkey, 21 - 24 July 2014, pp.429, (Summary Text)
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Akça S., Tel E., Kara A.  
TURKISH PHYSICAL SOCIETY 30th INTERNATIONAL PHYSICS CONGRESS (TPS30), İstanbul, Turkey, 2 - 05 September 2013, pp.578, (Summary Text)
- XLVIII. **Nükleer Tıpta Kullanılan  $^{61}\text{Fe}$ ,  $^{64}\text{Cu}$  Radyoizotoplarının Üretiminin ( $\sigma$ ,a) Reaksiyon Tesir Kesiti**  
Akça S., Tel E., Kara A., Aydın A.  
Ulusal Proton Hızlandırıcıları Çalıştayı, Ankara, Turkey, 18 - 19 April 2013, pp.1, (Unpublished)
- XLIX. **Mantar Türlerinde  $^{90}\text{Sr}$  ve  $^{129}\text{I}$  Radyoizotop Konsantrasyonlarının ve Toplam Alfa, Toplam Beta Seviyelerinin Belirlenmesi**  
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- L. **Mantar Türlerinde  $^{90}\text{Sr}$  ve  $^{129}\text{I}$  Radyoizotop Konsantrasyonlarının ve Toplam Alfa, Beta Seviyelerinin Belirlenmesi**  
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- LI. **Mantar Türlerinde Doğal Radyoaktivite Ölçümü**  
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- LII. **XRF, WDXRF ve ICP-OES tekniği kullanılarak süt ve süt ürünlerinde ağır metal analizi**  
Bali T., Söğüt Ö., Reyhanlıoğlu H., Akça S., Özdemir Y.  
TURKISH PHYSICAL SOCIETY, 27th INTERNATIONAL PHYSICS CONGRESS (TPS27), İstanbul, Turkey, 14 - 17 September 2010, pp.428, (Summary Text)

## Other Publications

- I. **Ç.Ü. FEF Ders Notu Genel Fizik III Laboratuvarı**  
UFUKTEPE Y., KARAKILÇIK M., YÜKSEL M., AKYOL M., AKÇA G., AKÇA S., GÜRSUL M., ŞEKER(ZAİMOĞLU) Z., ÇETİN G., YEĞEN S. B., et al.  
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- II. **Genel Fizik III Laboratuvarı**

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## Funded Projects

- AKÇA ÖZALP S., HALEFOĞLU Y. Z., TOPAKSU M., PORTAKAL UÇAR Z. G., Project Supported by Higher Education Institutions, YBO3:Nd3 Fosforunun Sentezlenmesi, Termolüminesans (TL) Dozimetrik Özelliklerinin İncelenmesi ve TL Kinetik Parametrelerinin Hesaplanması, 2023 - Continues
- TOPAKSU M., KAYNAR Ü. H., AYVACIKLI M., AKÇA ÖZALP S., PORTAKAL UÇAR Z. G., CAN N., Project Supported by Higher Education Institutions, ZrO2; Tb, Sm, Eu Katkılı Fosforların Lüminesans Özelliklerinin Belirlenmesi, 2023 - Continues
- PORTAKAL UÇAR Z. G., TOPAKSU M., AKÇA ÖZALP S., Project Supported by Higher Education Institutions, Çeşitli Aydınlatma ve İç Tesisat Malzemelerinde Kullanılan Porselen İçeriklerin Termolüminesans (TL) Dozimetresi Olarak Kullanılabilirliklerinin İncelenmesi, 2021 - 2024
- HALEFOĞLU Y. Z., TOPAKSU M., AKÇA S., PORTAKAL Z. G., DOĞAN T., OĞLAĞCI M., Project Supported by Higher Education Institutions, FARKLI TÜRDE İNORGANİK FOSFORLARIN HAZIRLANMASI SENTEZLENMESİ VE LÜMİNESANS ÖZELLİKLERİNİN İNCELENMESİ, 2018 - 2024
- Topaksu M., Balcı S., Portakal Uçar Z. G., Akça Özalp S., Doğan T., Yüksel M., Project Supported by Higher Education Institutions, Silisyumca Zengin Minerallerin Lüminesans Özelliklerinin Belirlenmesi, 2016 - 2023
- PORTAKAL UÇAR Z. G., AYVACIKLI M., OĞLAĞCI M., KAYNAR Ü. H., TOPAKSU M., YÜKSEL M., DOĞAN T., CAN N., AKÇA S., Project Supported by Higher Education Institutions, Nadir Toprak Elementi Katkılı Zn2SiO4 Fosforunun Dozimetrik Özelliklerinin TL Yöntemiyle Belirlenmesi, 2019 - 2021
- AKÇA ÖZALP S., TOPAKSU M., PORTAKAL Z. G., HALEFOĞLU Y. Z., YÜKSEL M., OĞLAĞCI M., Project Supported by Higher Education Institutions, Dolomit Mineralinin Termolüminesans (TL) Özelliklerinin İncelenmesi, 2018 - 2021
- TOPAKSU M., PARLAK O., BALCI YEGEN S., PORTAKAL Z. G., YÜKSEL M., AKÇA S., DOĞAN T., Project Supported by Higher Education Institutions, Muskovit Mineralinin Termolüminesans(TL) Özelliklerinin İncelenmesi, 2016 - 2018
- YÜKSEL M., TOPAKSU M., DOĞAN T., AKÇA S., UĞUR F. A., PORTAKAL Z. G., Project Supported by Higher Education Institutions, Tarsus İlçesinin Doğal Radyoaktivitesinin Belirlenmesi ve İzo-radyoaktivite Haritasının Çıkarılması, 2015 - 2018
- TOPAKSU M., YÜKSEL M., AKÇA S., DOĞAN T., PARLAK O., Project Supported by Higher Education Institutions, Serpantinit Mineralinin Karakterizasyonu ve Lüminesans Özellikleri, 2015 - 2018
- TOPAKSU M., AKÇA S., Project Supported by Higher Education Institutions, YARI-DENEYSEL (?n) REAKSİYON TESİR KESİTİ FORMÜLLERİNİN ÖNERİLMESİ VE NÜKLEER DATA DEĞERLENDİRMESİ, 2013 - 2018
- DOĞAN T., YÜKSEL M., TOPAKSU M., BALCI YEGEN S., PORTAKAL Z. G., AKÇA S., Project Supported by Higher Education Institutions, Calculation of Activation Energy Using VHR Method for Low Temperature Peak of Gypsum Mineral, 2017 - 2017
- TOPAKSU M., KAYIŞ TOPAKSU A., PORTAKAL Z. G., AKÇA S., BALCI YEGEN S., YÜKSEL M., DOĞAN T., Project Supported by Higher Education Institutions, International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT2017), 2017 - 2017
- TOPAKSU M., YÜKSEL M., DOĞAN T., BALCI YEGEN S., AKÇA S., PORTAKAL Z. G., KARAMAN T., Project Supported by Higher Education Institutions, Analysis of Thermoluminescence Kinetic Parameters of Apatite with CGCD Method, 2017 - 2017
- YÜKSEL M., DOĞAN T., PORTAKAL Z. G., BALCI YEGEN S., AKÇA S., TOPAKSU M., Project Supported by Higher Education Institutions, A Preliminary Study of TL and OSL Traps for Aragonite Mineral, 2017 - 2017
- TOPAKSU M., UĞUR F. A., YÜKSEL M., DOĞAN T., PORTAKAL Z. G., AKÇA S., BALCI YEGEN S., Project Supported by Higher Education Institutions, Güneydoğu Anadolu Bölgesindeki Toprak ve Fıstık Örneklerinin Doğal Radyoaktivitesinin Belirlenmesi, 2015 - 2017
- TOPAKSU M., YAZICI A. N., YÜKSEL M., DOĞAN T., PORTAKAL Z. G., AKÇA S., BALCI YEGEN S., KAFADAR V. E., AYVACIKLI M., KARALI T., et al., Project Supported by Higher Education Institutions, 10th International Conference on Luminescence and ESR Dosimetry, 2016 - 2016

## Memberships and Roles in Scientific Organizations

RADKOR ? Radyasyondan Korunma Uzmanları Derneği, Member, 2016 - Continues

## Metrics

Publication: 97

Citation (WoS): 398

Citation (Scopus): 421

H-Index (WoS): 13

H-Index (Scopus): 14

## Congress and Symposium Activities

Turkish Physical Society 35th International Physics Congress, Attendee, Muğla, Turkey, 2019

Turkish Physical Society 33th International Physics Congress, Attendee, Muğla, Turkey, 2017

Fifth International Conference on Radiation and Applications in Various Fields of Research (RAD2017), Attendee, Serbia And Montenegro, 2017

International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT 2017), Attendee, Adana, Turkey, 2017

XI. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, Attendee, Aydın, Turkey, 2016

International Conference on Theoretical and Experimental Studies in Nuclear Applications and Technology (TESNAT 2016), Attendee, Hatay, Turkey, 2016

International Vacuum Workshop, IV. Charged Particle Optics Winter School (YUKPOP 2016), Attendee, Afyon, Turkey, 2016

The 9th International Conference on Luminescence and ESR Dosimetry, Attendee, Antalya, Turkey, 2015

International Workshop on Theoretical and Experimental Studies in Nuclear Applications and Technology, Attendee, Osmaniye, Turkey, 2015

VII. International Workshop on Nuclear Structure Properties, Attendee, Sinop, Turkey, 2014

International Conference on Computational and Experimental Science and Engineering, Attendee, Antalya, Turkey, 2014

Turkish Physical Society 31th International Physics Congress, Attendee, Muğla, Turkey, 2014

Turkish Physical Society 30th International Physical Congress, Attendee, İstanbul, Turkey, 2013

Ulusal Proton Hızlandırıcıları Çalıştayı, Attendee, Ankara, Turkey, 2013

5. Nükleer Yapı Özellikleri Çalıştayı, Attendee, Muş, Turkey, 2011

Ulusal Lüminesans ve Dozimetri Kongresi, Attendee, Mersin, Turkey, 2011

Ulusal Lüminesans ve Dozimetri Kongresi (LUMİDOZ-V), Attendee, Mersin, Turkey, 2011

Turkish Physical Society 27th International Physics Congress, Attendee, İstanbul, Turkey, 2010

## Awards

AKÇA S., Erasmus Staj Hareketliliği, ERASMUS, October 2013

AKÇA S., Bölüm İkinciliği, Balıkesir Üniversitesi, June 2007

## Non Academic Experience

Karlsruhe Institute of Technology (KIT), Institute for Neutron Physics and Reactor Technology (INR), Almanya, Misafir Araştırmacı