



SEDANUR KALECİK

RES. ASST.

Email : sedanurkalecik@atauni.edu.tr

Office Phone : [+90 0442 231 4167](tel:+9004422314167) Extension: 4167

International Researcher IDs

ScholarID: Jg7ZPT8AAAAJ

ORCID: 0000-0003-0977-3598

Yoksis Researcher ID: 336444

Learning Knowledge

Doctorate
2019 - Continues

Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey

Postgraduate
2015 - 2018

Ondokuz Mayıs University, Institute Of Science, Turkey

Undergraduate
2009 - 2013

Ondokuz Mayıs University, Faculty Of Arts And Sciences, Department Of Physics, Turkey

Dissertations

Postgraduate, Investigation of the properties of C₁₉H₁₄BrN₂O, C₁₅H₁₁BrFN₂O₂ and C₂₁H₁₄BrFN₂O₂ molecules by X-rays and some spectroscopic methods, Ondokuz Mayıs University, Institute Of Science, Atom ve Molekül Fiziği, 2018

Academic Titles / Tasks

Research Assistant
2021 - Continues

Ataturk University, Fen Fakültesi, Fizik

Supported Projects

1. KURUCU Y., ÖZDOĞAN A., KALECİK S., Project Supported by Higher Education Institutions, Radyo-opak olmayan protetik kaplama malzemesi geliştirilebilmesinin bir yolu: Dişlerdeki mine ve dentin tabakalarının ve çeşitli kaplama malzemelerinin radyasyon soğurma parametrelerinin simülasyon ve deneysel olarak belirlenmesi, 2022 - Continues
2. Yılmaz D., Gürol A., Gürses A., Maman A., Kalecik S., Project Supported by Higher Education Institutions, I-131 ve uranyum giderilmesinde modifiye bentonit kil tabanlı nanosorbentlerin hazırlanması ve nükleer spektroskopi

uygulamalarının yapılması, 2022 - 2024

3. Yavuz M., Kalecik S., Project Supported by Higher Education Institutions, The structure analysis of 5-Bromo-4-Floro-2-Hydroxy Benzaldehyde containing schiff base compounds by using crystallographic, spectroscopic and theoretical methods, 2017 - 2018

Awards

1. Kalecik S., Yayın Teşvik, Atatürk Üniversitesi Rektörlüğü, May 2024
2. Kalecik S., Yayın Teşvik, Atatürk Üniversitesi Rektörlüğü, January 2024
3. Abouhaswa A., Kalecik S., Kavaz E., Yayın Teşvik, Tübitak Ulakbim, March 2023
4. Kalecik S., Yayın Teşvik, Atatürk Üniversitesi Rektörlüğü, January 2023

Published journal articles indexed by SCI, SSCI, and AHCI

1. **Removal of ^{177}Lu from radioactive wastewater using Montmorillonite clay**
Yılmaz D., Gürses A., Kalecik S., Maman A., Şahin E., Güneş K.
Applied Radiation and Isotopes, vol.211, 2024 (SCI-Expanded)
2. **Experimental investigation of some photon interaction parameters of popular restorative dental materials with a non-destructive technique**
Kalecik S., Yılmaz D., Gürol A., Özdoğan A., Kurucu Y.
PHYSICA SCRIPTA, vol.99, no.6, 2024 (SCI-Expanded)
3. **Influence of Praseodymium Oxide on the Structural, Mechanical and Photon, Charged Particles, and Neutron Shielding Properties of Alumina Borate Glass**
Acikgoz A., Izguden I., Tasgin Y., Yılmaz D., Demircan G., Kalecik S., Aktas B.
CERAMICS INTERNATIONAL, vol.50, no.19, pp.34573-34584, 2024 (SCI-Expanded)
4. **Investigation of the structural, mechanical, radiation and neutron shielding properties of the $\text{TeO}_2\text{-B}_2\text{O}_3\text{-Li}_2\text{O-MoO}_3\text{-CuO}$ glass system**
Fidan M., Acikgoz A., Yılmaz D., Demircan G., Kalecik S., Aktaş B., İşgör S.
Journal of Alloys and Compounds, vol.976, 2024 (SCI-Expanded)
5. **An experimental analysis of the effects of SrO on the mechanical, structural, optical, and nuclear radiation shielding properties of barium borate glasses**
Kavgacı M., Yaykaşlı H., Eskalen H., Kavaz Perişanoğlu E., Kalecik S., Yılmaz R., Tunç H.
OPTICAL MATERIALS, vol.149, pp.1-12, 2024 (SCI-Expanded)
6. **An alternative approach for determining the effective atomic number of some compounds: Monte Carlo study**
Özşahin M., Kalecik S., Toker O., Kurucu Y., İçelli O.
Radiation Physics and Chemistry, vol.215, 2024 (SCI-Expanded)
7. **Exploring the radiation shielding properties of $\text{B}_2\text{O}_3\text{-PbO-TeO}_2\text{-CeO}_2\text{-WO}_3$ glasses: A comprehensive study on structural, mechanical, gamma, and neutron attenuation characteristics**
Solak B. B., Aktas B., Yılmaz D., Kalecik S., Yalcin S., Acikgoz A., Demircan G.
MATERIALS CHEMISTRY AND PHYSICS, vol.312, 2024 (SCI-Expanded)
8. **An experimental study for the identification of some bacterial strains for uranium bioremediation by gamma spectrometry**
Yılmaz D., Dikbaş N., Kalecik S., Uçar S., Alım Ş.
RADIATION PHYSICS AND CHEMISTRY, vol.212, 2023 (SCI-Expanded)
9. **Assessment of structural, physical properties as well as radiation safety competence of lithium borate glass-ceramics: Experimental and theoretical evaluation**
Ekinci N., Alsaif N. A. M., Aygün B., Sarıtaş S., Kalecik S., Rammah Y. S.
Physica Scripta, vol.98, no.4, 2023 (SCI-Expanded)

10. **Radiation shielding parameters and Micro-Raman spectral analysis of some pyroclastic rocks**
Yılmaz D., Kılıç A. D., Kalecik S.
RADIATION PHYSICS AND CHEMISTRY, vol.203, pp.1-12, 2023 (SCI-Expanded)
11. **An investigation on compatibility of experimental effective atomic numbers of some Fe–Ni alloys with those predicted by MCNP**
Kalecik S., Yılmaz D., Kurucu Y., Gürol A., Toker O., İçelli O.
Radiation Physics and Chemistry, vol.202, 2023 (SCI-Expanded)
12. **Two new Schiff bases of (E)-2,4-di-tert-butyl-6-((4-fluorophenylimino)methyl)phenol (I) and (E)-2,4-di-tert-butyl-6-((3-iodo-4-methylphenylimino)methyl)phenol (II): structural, spectroscopic and quantum chemical calculations**
Güzel E., Macit M., Ergüzeloğlu E., Kalecik S., Keleşoğlu Z., Yavuz M.
Molecular Crystals and Liquid Crystals, vol.763, no.1, pp.96-113, 2023 (SCI-Expanded)
13. **Newly designed borate glass system for optical and radiation shielding applications: Multiple effects of CdS on structural, magnetic, optical, mechanical and photon shielding features**
Abouhaswa A., Kalecik S., Kavaz E.
CERAMICS INTERNATIONAL, vol.48, no.18, pp.27120-27129, 2022 (SCI-Expanded)
14. **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 AND TECHNOLOGY, vol.50, no.4, pp.447-455, 2022 (SCI-Expanded)

Articles Published in Other Journals

1. **Albedo Numbers of Ag₇₂Cu₂₈ Alloy Etched by Hydrofluoric Acid**
Kalecik S., Pathman A. F., Yılmaz D., Kurucu Y.
International Journal of Scientific and Engineering Research, vol.13, no.12, pp.23-26, 2022 (Peer-Reviewed Journal)
2. **Chemical Activity and Spectroscopic Studies of (E)-4-bromo-5-fluoro-2-(((4-(phenylamino)phenyl)imino)methyl)phenol Compound**
KALECİK S., GÜZEL E., DOĞAN O. E., AĞAR E., YAVUZ M.
Karadeniz Fen Bilimleri Dergisi, vol.12, no.2, pp.821-840, 2022 (Peer-Reviewed Journal)
3. **(E)-2-[[4-(Anilinophenyl)imino]methyl]-4-bromo-5-fluorophenol**
Kalecik S., Yavuz M., Kavraz F., Eserci H., Ağar E.
IUCrData, vol.2, 2017 (Peer-Reviewed Journal)
4. **2-[(E)-[2-Methyl-3-nitrophenyl]imino]methyl]-4-nitrophenol**
Tanak H., Toğurman F., Kalecik S., Dege N., Yavuz M.
Acta Crystallographica Section E-Structure Reports Online, vol.69, 2013 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

1. **Albedo Numbers of Cu₆₉Zn₃₇ Alloys Etched by Hydrofluoric Acid**
Pathman A. F., Kalecik S., Yılmaz D.
Turkish Physical Society 38th International Physics Congress, Muğla, Turkey, 31 August - 04 September 2022, vol.04, no.6, pp.113-116
2. **Effective Atomic Numbers of Some Thermoplastic Materials For 59.54 KeV Gamma Rays**
Kalecik S., Yılmaz D., Gürol A., Kurucu Y.
1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS 2021), Erzurum, Turkey, 10 - 12 September 2021
3. **Removal Efficiency of I-131 BY Charcoal and Bentonite Clay**
Kalecik S., Yılmaz D., Gürol A.
1st INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN FUNDAMENTAL AND APPLIED SCIENCES (ISFAS

2021), Erzurum, Turkey, 10 - 12 September 2021

4. Investigation of Multi-Electron Systems via the Hartree-Fock Method

Kalecik S.

Turkish Physical Society 36th International Physics Congress, İstanbul, Turkey, 1 - 05 September 2020

Other Publications

1. Physics Laboratory I

Gürol A., Yılmaz D., Kavaz E., Fidan M., Cinan E., Güney Y., Kalecik S., Tok E.

Experiment, pp.1-56, 2023

Tasks In Event Organizations

Kalecik S., Güney Y., Er H., TURGUT E., MERHAN MUĞLU G., AR-GE LABORATUVAR ÇALIŞMALARINDA İNSAN SAĞLIĞI VE İŞ GÜVENLİĞİ, Workshop Organization, Erzurum, Turkey, Şubat 2024

Kalecik S., GÜNEY Y., BİLİMSEL ÇALIŞMALARDAKİ BİYOLOJİK VE FİZİKSEL RİSKLER, Workshop Organization, Erzurum, Turkey, Şubat 2024

Kalecik S., Sarıtaş S., Kılıç D., Ünver Y., Nişancı B., Toraman E., Ömeroğlu M. A., Orak T., Taş S., Levet A., et al., 1st International Symposium On Recent Advances In Fundamental And Applied Sciences (Isfas-2021), Scientific Congress, Erzurum, Turkey, Eylül 2021

Kalecik S., Sarıtaş S., Ünver Y., Nişancı B., Bayrakçeken Nişancı F., Karaman M., Ömeroğlu M. A., Orak T., Albayrak Ş., Saraç Y., et al., 1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021) , Scientific Congress, Erzurum, Turkey, Eylül 2021

Metrics

Publication: 23

Citation (WoS): 18

Citation (Scopus): 33

H-Index (WoS): 2

H-Index (Scopus): 4

Congress and Symposium Activities

1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021), Attendee, Erzurum, Turkey, 2021

1st INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN FUNDAMENTAL AND APPLIED SCIENCES (ISFAS-2021), Attendee, Erzurum, Turkey, 2021

Turkish Physical Society 36th International Physics Congress , Attendee, İstanbul, Turkey, 2020

Research Areas

Atomic and Molecular Physics, Atomic Spectra and Photon Interactions, Nuclear physics