



# ERKAN İLİK

## ASSOC. PROF.

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Fakültesi F-5 Blok Fizik Bölümü TR-26040 Meşelik Yerleşkesi  
Eskişehir, Türkiye

### International Researcher IDs

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ScopusID: 55705209200

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### Learning Knowledge

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Doctorate 2013 - 2017	Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (Dr), Turkey
Postgraduate 2010 - 2013	Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (YI) (Tezli), Turkey
Undergraduate 2005 - 2010	Eskisehir Osmangazi University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey

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### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Soğuk akan post-deşarj plazma reaktörlerinin üretimi ve bazı özelliklerinin incelenmesi, Eskişehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, 2017

Postgraduate, Genelleştirilmiş bir bose gazı modelinin bazı istatistik mekaniksel özelliklerinin incelenmesi, Eskişehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, Fizik (YI) (Tezli), 2013

### Academic Titles / Tasks

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Assistant Professor

2022 - Continues

Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ

Research Assistant PhD

2017 - 2022

Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ

Research Assistant

2010 - 2017

Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ

## Supported Projects

1. KILIÇ G., BİRDOĞAN S., İLİK E., KAVAZ E., Project Supported by Higher Education Institutions, Çeşitli divalan metal iyonu katkılı Bizmut-Borotellur oksit camların sentezi, optik, yapısal karakterizasyonu ve radyasyon zırlama özelliklerinin deneysel ve teorik incelenmesi, 2022 - Continues
2. Tekin H. O., Issa B. A., Elshami W., Almisned G., Kılıç G., İlik E., Susoy G., Universities of Other Countries Supported Project, A critical evaluation on nuclear safety properties of novel heavy metal oxide glass containers for transportation and waste management in Nuclear Medicine hot labs and nuclear power plants, 2023 - 2024
3. İlik E., Kılıç G., İşsever U. G., Project Supported by Higher Education Institutions, CeO<sub>2</sub> Katkılı Lityum-Borotellür Oksit Camların Sentezi ve Fiziksel, Optik ve Yapısal Karakterizasyonu, 2020 - 2022
4. İşsever U. G., İlik E., Kılıç G., Project Supported by Higher Education Institutions, Oksiflorür ZnTeTa Camların Sentezi ve Karakterizasyonu, 2017 - 2020
5. Akan T., İlik E., Project Supported by Higher Education Institutions, Production and Investigation of Spectroscopic Characteristics of Nitrogen Cold Plasmas, 2017 - 2019
6. Kılıç G., İlik E., İşsever U. G., Project Supported by Higher Education Institutions, Katkılı ve Katkısız ZnTeTa Oksit Camların Oluşturulması ve Karakterizasyonu, 2015 - 2016
7. Akan T., İlik E., Tanışlı M., Project Supported by Higher Education Institutions, Investigation of Cold Flowing Radio Frequency Post Discharges, 2014 - 2016
8. AKAN T., İLİK E., Project Supported by Higher Education Institutions, Düşük Basınçta Soğuk-Akan-Post-Deşarj Plazmaların Etkileşiminin İncelenmesi, 2014 - 2015
9. Akan T., İlik E., Project Supported by Higher Education Institutions, Düşük Basınçta Soğuk Akan Post Deşarj Plazmaların Etkileşiminin İncelenmesi, 2014 - 2015

## Awards

1. İlik E., 2021 YILI BİLİMSEL ARAŞTIRMA TEŞVİK ÖDÜLÜ, Eskişehir Osmangazi Üniversitesi, April 2022

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

1. **Tailoring optimal KERMA, projected range, and mass stopping power, and gamma-ray shielding capabilities through BaO/ZnO/CdO/SrO incorporation into Na<sub>2</sub>O-SiO<sub>2</sub> glasses**  
YILMAZ ALAN H., Yilmaz A., Susam L. A., Ozturk G., KILIÇ G., İLİK E., Oktik S., Akkus B., Almisned G., Tekin H. O. RADIATION PHYSICS AND CHEMISTRY, vol.226, 2025 (SCI-Expanded)
2. **First-ever fusion of high entropy alloy (HEA) with glass: Enhancing of critical properties of zinc-tellurite glass through TiZrNbHfTaOx incorporation**

- Güler Ö., KILIÇ G., KAVAZ PERİŞANOĞLU E., İLİK E., Guler S. H., ALMisned G., Tekin H.  
Ceramics International, vol.50, no.20, pp.39927-39939, 2024 (SCI-Expanded)
3. **A first-time fusion of TiNbWMoZrOx high entropy oxide (HEO) with zinc-tellurite glass: Toward superior physical properties**  
KILIÇ G., Güler Ö., KAVAZ PERİŞANOĞLU E., İLİK E., Guler S. H., ALMisned G., Tekin H.  
Journal of Non-Crystalline Solids, vol.642, 2024 (SCI-Expanded)
  4. **A critical assessment of the mechanical strength and radiation shielding efficiency of advanced Concrete composites and Vanadium Oxide-Glass container for enhanced nuclear waste management**  
Tekin H., ALMisned G., KILIÇ G., İLİK E., Susoy G., Elshami W., Issa B.  
Results in Physics, vol.64, 2024 (SCI-Expanded)
  5. **Non-decreasing monotonic effects of cerium and gadolinium on tellurite glasses toward enhanced heavy-charged particle stopping: alpha-proton particles as major a part of cosmic radiation**  
Alan H. Y., Almisned G., Yilmaz A., Susam L. A., Ozturk G., Kılıç G., İlik E., Tuysuz B., Topuzlar S. E., Akkus B., et al.  
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.60, no.3, pp.823-832, 2024 (SCI-Expanded)
  6. **KERMA, projected range, mass stopping power and gamma-ray shielding properties of antimony and tellurium reinforced iron phosphate glasses**  
YILMAZ ALAN H., YILMAZ A., SUSAM L., Ozturk G., KILIÇ G., İLİK E., Oktik S., AKKUŞ B., ALMisned G., Tekin H.  
Radiation Physics and Chemistry, vol.218, 2024 (SCI-Expanded)
  7. **The role of Zr2O as glass-network former on radiation transmission properties of aluminoborosilicate (ABS) glasses: A glass type for nuclear waste immobilization**  
ALMisned G., Sen Baykal D., İLİK E., KILIÇ G., Tekin H.  
Ceramics International, vol.49, no.23, pp.39124-39133, 2023 (SCI-Expanded)
  8. **Designing a Lead-free and high-density glass for radiation facilities: Synthesis, physical, optical, structural, and experimental gamma-ray transmission properties of newly designed barium-borosilicate glass sample**  
Sen Baykal D., KILIÇ G., İLİK E., KAVAZ E., ALMisned G., Cakirli R., Tekin H.  
Journal of Alloys and Compounds, vol.965, 2023 (SCI-Expanded)
  9. **Electrochemical investigation of ZnO effect of amorphous V2O5–P2O5 glassy electrodes**  
Mohammadigharehbagh R., İLİK E., KILIÇ G., Öztetik B., PAT S., KORKMAZ Ş.  
Journal of Materials Science: Materials in Electronics, vol.34, no.30, 2023 (SCI-Expanded)
  10. **Mechanical, gamma rays and neutron radiation transmission properties for some ZnO–TeO2–P2O5–ZnX glasses**  
KILIÇ G., İLİK E., KAVAZ E., ALMisned G., Sen Baykal D., Tekin H.  
Ceramics International, vol.49, no.19, pp.31773-31783, 2023 (SCI-Expanded)
  11. **Tungsten (VI) oxide reinforced antimony glasses for radiation safety applications: A throughout investigation for determination of radiation shielding properties and transmission factors**  
ALMisned G., Sen Baykal D., İLİK E., Abuzaid M., Issa S. A., KILIÇ G., Zakaly H. M., Ene A., Tekin H.  
Heliyon, vol.9, no.7, 2023 (SCI-Expanded)
  12. **Elucidating the influences of Tantalum (V) oxide in Bi2O3–TeO2–ZnO ternary glasses: An experimental characterization study on optical and nuclear radiation transmission properties of high-density glasses**  
İlik B. O., Kılıç G., İlik E., Kavaz E., Almisned G., Tekin H.  
CERAMICS INTERNATIONAL, vol.49, pp.10906-10913, 2023 (SCI-Expanded)
  13. **Tailoring optimal translocation conditions towards proximity of borotellurite glasses to the red spectrum through CeO2 for practical applications**  
ÇETİNKAYA Ç., ÇOKDUYGULULAR E., KINACI B., İLİK E., KILIÇ G., ALMisned G., Zakaly H. M., Ene A., Tekin H.  
Heliyon, vol.9, no.4, 2023 (SCI-Expanded)
  14. **Comparative analysis on application conditions of indium (III) oxide-reinforced glasses in nuclear waste management and source transportation: A Monte Carlo simulation study**  
ALMisned G., Baykal D. S., KILIÇ G., İLİK E., Rabaa E., Susoy G., Zakaly H. M., Ene A., Tekin H.  
Heliyon, vol.9, no.3, 2023 (SCI-Expanded)

15. **Functional assessment of various rare-earth (RE) ion types: An investigation on gamma-ray attenuation properties of GeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-P<sub>2</sub>O<sub>5</sub>-ZnO-Tb<sub>2</sub>O<sub>3</sub>-RE magneto-optical glasses**  
ALMisned G., Sen Baykal D., İLİK E., Abuzaid M., KILIÇ G., Tekin H.  
Optik, vol.274, 2023 (SCI-Expanded)
16. **Mechanical properties, elastic moduli, and gamma ray attenuation competencies of some TeO<sub>2</sub>-WO<sub>3</sub>-GdF<sub>3</sub> glasses: Tailoring WO<sub>3</sub>-GdF<sub>3</sub> substitution toward optimum behavioral state range**  
ALMisned G., Rabaa E., Sen Baykal D., Kavaz E., İLİK E., KILIÇ G., Zakaly H. M. H., Ene A., Tekin H. O.  
OPEN CHEMISTRY, vol.21, no.1, 2023 (SCI-Expanded)
17. **A Promising Glass Type in Electronic and Laser Applications: Elastic Moduli, Mechanical, and Photon Transmission Properties of WO<sub>3</sub> Reinforced Ternary-Tellurite Glasses**  
ALMisned G., Rabaa E., Rammah Y. S. S., Khattari Z. Y. Y., Baykal D. S., İLİK E., KILIÇ G., Zakaly H. M. H., Ene A., Tekin H. O.  
SYMMETRY-BASEL, vol.15, no.3, 2023 (SCI-Expanded)
18. **Exploring the Radioprotective Indium (III) Oxide Screens for Mammography Scans Using a Three-Layer Heterogeneous Breast Phantom and MCNPX: A Comparative Study Using Clinical Findings**  
ALMisned G., Elshami W., KILIÇ G., İLİK E., Rabaa E., Zakaly H. M. H., Ene A., Tekin H. O.  
Medicina (Lithuania), vol.59, no.2, 2023 (SCI-Expanded)
19. **Translocation of tungsten(vi) oxide/gadolinium(iii) fluoride in tellurite glasses towards improvement of gamma-ray attenuation features in high-density glass shields**  
Almisned G., Rabaa E., Sen Baykal D., İLİK E., KILIÇ G., Zakaly H. M. H., Ene A., Tekin H. O.  
Open Chemistry, vol.21, no.1, 2023 (SCI-Expanded)
20. **Toward the strengthening of radioprotection during mammography examinations through transparent glass screens: A benchmarking between experimental and Monte Carlo simulation studies**  
ALMisned G., Elshami W., Rabaa E., KILIÇ G., İLİK E., Sen Baykal D., Ene A., Tekin H.  
Frontiers in public health, vol.11, pp.1171209, 2023 (SCI-Expanded)
21. **The role of Ag<sub>2</sub>O incorporation in nuclear radiation shielding behaviors of the Li<sub>2</sub>O-Pb<sub>3</sub>O<sub>4</sub>-SiO<sub>2</sub> glass system: A multi-step characterization study**  
Almisned G., Susoy G., Zakaly H. M. H., Rabaa E., KILIÇ G., İLİK E., Sen Baykal D., Ene A., Tekin H. O.  
Open Chemistry, vol.21, no.1, 2023 (SCI-Expanded)
22. **The impact of chemical modifications on gamma-ray attenuation properties of some WO<sub>3</sub>-reinforced tellurite glasses**  
Almisned G., Rabaa E., Sen Baykal D., İLİK E., KILIÇ G., Zakaly H. M. H., Ene A., Tekin H. O.  
Open Chemistry, vol.21, no.1, 2023 (SCI-Expanded)
23. **A critical evaluation on nuclear safety properties of novel cadmium oxide-rich glass containers for transportation and waste management: Benchmarking with a reinforced concrete container**  
Almisned G., Baykal D. S., Kılıç G., İlik E., Zakaly H. M., Ene A., Tekin H. O.  
FRONTIERS IN PHYSICS, vol.10, 2022 (SCI-Expanded)
24. **ZnO/CdO translocation in P<sub>2</sub>O<sub>5</sub>-TeO<sub>2</sub>-ZnO ternary glass systems: A reformative enhancement tool for physical, optical, and heavy-charged particles attenuation properties**  
Kılıç G., İlik E., Issa S. A., Almisned G., Tekin H.  
OPTIK, vol.268, 2022 (SCI-Expanded)
25. **Tailoring critical material properties of some ternary glasses through ZnO/CdO alteration: a focusing study on multiple behavioral changes**  
Kilic G., Ilik E., Issa S. A. M., Almisned G., Tekin H. O.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.128, no.10, 2022 (SCI-Expanded)
26. **Synthesis and experimental characterization on fast neutron and gamma-ray attenuation properties of high-dense and transparent Cadmium oxide (CdO) glasses for shielding purposes**  
KAVAZ E., İLİK E., KILIÇ G., ALMisned G., Tekin H.  
Ceramics International, vol.48, pp.23444-23451, 2022 (SCI-Expanded)
27. **Effect of heavy rare-earth element oxides on physical, optical and gamma-ray protection abilities of**

**zinc-borate glasses**

İLİK E.

Applied Physics A: Materials Science and Processing, vol.128, no.6, 2022 (SCI-Expanded)

28. **CdO-rich quaternary tellurite glasses for nuclear safety purposes: Synthesis and experimental gamma-ray and neutron radiation assessment of high-density and transparent samples**  
KILIÇ G., KAVAZ E., İLİK E., ALMisned G., Tekin H.  
OPTICAL MATERIALS, vol.128, 2022 (SCI-Expanded)
29. **A closer-look on Copper(II) oxide reinforced Calcium-Borate glasses: Fabrication and multiple experimental assessment on optical, structural, physical, and experimental neutron/gamma shielding properties**  
İLİK E., KAVAZ E., KILIÇ G., Issa S. A., Zakaly H. M., Tekin H.  
CERAMICS INTERNATIONAL, vol.48, no.5, pp.6780-6791, 2022 (SCI-Expanded)
30. **Synthesis and characterization of vanadium(V) oxide reinforced calcium-borate glasses: Experimental assessments on Al<sub>2</sub>O<sub>3</sub>/BaO<sub>2</sub>/ZnO contributions**  
İlik E., Kavaz E., Kilic G., Issa S. A., Almisned G., Tekin H.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.580, pp.1-15, 2022 (SCI-Expanded)
31. **Cerium (IV) oxide reinforced Lithium-Borotellurite glasses: A characterization study through physical, optical, structural and radiation shielding properties**  
İLİK E., KILIÇ G., İŞSEVER U. G., Issa S. A. M., Zakaly H. M. H., Tekin H. O.  
CERAMICS INTERNATIONAL, vol.48, no.1, pp.1152-1165, 2022 (SCI-Expanded)
32. **Structural characterization and gamma-ray attenuation properties of rice-like alpha-TeO<sub>2</sub> crystalline microstructures (CMS) grown rapidly on free surface of tellurite-based glasses**  
ALMisned G., KILIÇ G., İLİK E., Issa S. A. M., Zakaly H. M. H., Badawi A., İŞSEVER U. G., Tekin H. O., Ene A.  
JOURNAL OF MATERIALS RESEARCH AND TECHNOLOGY-JMR&T, vol.16, pp.1179-1189, 2022 (SCI-Expanded)
33. **Synthesis and structural, optical, physical properties of Gadolinium (III) oxide reinforced TeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-(20-x)Li<sub>2</sub>O-xGd<sub>2</sub>O<sub>3</sub> glass system**  
KILIÇ G., İLİK E., Issa S. A., Tekin H.  
Journal of Alloys and Compounds, vol.877, 2021 (SCI-Expanded)
34. **Fabrication, structural, optical, physical and radiation shielding characterization of indium (III) oxide reinforced 85TeO<sub>2</sub>-(15-x)ZnO-xIn<sub>2</sub>O<sub>3</sub> glass system**  
KILIÇ G., İLİK E., Issa S. A., Issa B., İŞSEVER U. G., Zakaly H. M., Tekin H.  
Ceramics International, vol.47, pp.27305-27315, 2021 (SCI-Expanded)
35. **Ytterbium (III) oxide reinforced novel TeO<sub>2</sub>-B<sub>2</sub>O<sub>3</sub>-V<sub>2</sub>O<sub>5</sub> glass system: Synthesis and optical, structural, physical and thermal properties**  
Kılıç G., İlik E., Issa S. A., Issa B., Al-Buriahı M., İşsever U. G., Zakaly H. M., Tekin H.  
Ceramics International, vol.47, pp.18517-18531, 2021 (SCI-Expanded)
36. **Deposition of cadmium (II) oxide-reinforced VP glassy thin films by thermionic vacuum arc (TVA) and structural characterization**  
İLİK E., Durmus C., KILIÇ G., Gokhan Issever U. G., AKAN T.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.12, pp.16311-16323, 2021 (SCI-Expanded)
37. **The Impact of CuO on physical, structural, optical and thermal properties of dark VPB semiconducting glasses**  
İŞSEVER U. G., KILIÇ G., İLİK E.  
Optical Materials, vol.116, 2021 (SCI-Expanded)
38. **The role of B<sub>2</sub>O<sub>3</sub> on the structural, thermal, and radiation protection efficacy of vanadium phosphate glasses**  
Kılıç G., İlik E., Mahmoud K., El-Agawany F., Alomairy S., Rammah Y.  
Applied Physics A: Materials Science and Processing, vol.127, no.4, 2021 (SCI-Expanded)
39. **Physical, thermal, optical, structural and nuclear radiation shielding properties of Sm<sub>2</sub>O<sub>3</sub> reinforced borotellurite glasses**

- Kılıç G., Issa S. A., İlik E., Kilicoglu O., İşsever U. G., El-Mallawany R., Issa B., Tekin H.  
CERAMICS INTERNATIONAL, vol.47, no.5, pp.6154-6168, 2021 (SCI-Expanded)
40. **Ta<sub>2</sub>O<sub>5</sub> reinforced Bi<sub>2</sub>O<sub>3</sub>-TeO<sub>2</sub>-ZnO glasses: Fabrication, physical, structural characterization, and radiation shielding efficacy**  
Kılıç G., Agawany F., Ozen İlik B., Mahmoud K., İlik E., Rammah Y.  
Optical Materials, vol.112, 2021 (SCI-Expanded)
41. **A journey for exploration of Eu<sub>2</sub>O<sub>3</sub> reinforcement effect on zinc-borate glasses: Synthesis, optical, physical and nuclear radiation shielding properties**  
Kılıç G., Issa S., İlik E., Kilicoglu O., Tekin H.  
CERAMICS INTERNATIONAL, vol.47, no.2, pp.2572-2583, 2021 (SCI-Expanded)
42. **Ta<sub>2</sub>O<sub>5</sub>-doped zinc-borate glasses: physical, structural, optical, thermal, and radiation shielding properties**  
Öztürk S., İlik E., Kılıç G., İşsever U. G.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.126, 2020 (SCI-Expanded)
43. **Novel zinc vanadyl boro-phosphate glasses: ZnO-V<sub>2</sub>O<sub>5</sub>- P<sub>2</sub>O<sub>5</sub>-B<sub>2</sub>O<sub>3</sub>: Physical, thermal, and nuclear radiation shielding properties**  
Kılıç G., İlik E., Mahmoud K. A., El-Mallawany R., El-Agawany F., Ramman Y. S.  
CERAMICS INTERNATIONAL, vol.46, pp.19318-19327, 2020 (SCI-Expanded)
44. **The effect of B<sub>2</sub>O<sub>3</sub>/CdO substitution on structural, thermal, and optical properties of new black PVB/Cd semiconducting oxide glasses**  
Kılıç G., İlik E., İşsever U. G., Peker M.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.126, 2020 (SCI-Expanded)
45. **FTIR, UV-Vis-NIR spectroscopy, and gamma rays shielding competence of novel ZnO-doped vanadium borophosphate glasses**  
Rammah Y. S., El-Agawany F., Mahmoud K. A., El-Mallawany R., İlik E., Kılıç G.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, pp.9099-9113, 2020 (SCI-Expanded)
46. **Synthesis of novel AgO-doped vanadium-borophosphate semiconducting glasses and investigation of their optical, structural, and thermal properties**  
İlik E., Kılıç G., İşsever U. G.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, pp.8986-8995, 2020 (SCI-Expanded)
47. **Synthesis, characterization and crystalline phase studies of TeO<sub>2</sub>-Ta<sub>2</sub>O<sub>5</sub>-ZnO/ZnF<sub>2</sub> oxyfluoride semiconducting glasses**  
Kılıç G., İşsever U. G., İlik E.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.527, 2020 (SCI-Expanded)
48. **Adding Water Droplets Into Atmospheric Pressure Plasma Jet of Helium**  
İlik E., Durmus C., Akan T.  
IEEE TRANSACTIONS ON PLASMA SCIENCE, vol.47, pp.5000-5005, 2019 (SCI-Expanded)
49. **The synthesis and characterization of zinc-tellurite semiconducting oxide glasses containing Ta<sub>2</sub>O<sub>5</sub>**  
Kılıç G., İşsever U. G., İlik E.  
MATERIALS RESEARCH EXPRESS, vol.6, 2019 (SCI-Expanded)
50. **Characterization of Er<sup>3+</sup> doped ZnTeTa semiconducting oxide glass**  
Kılıç G., İşsever U. G., İlik E.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, pp.8920-8930, 2019 (SCI-Expanded)
51. **Optical properties of the atmospheric pressure helium plasma jet generated by alternative current (a.c.) power supply**  
İlik E., Akan T.  
PHYSICS OF PLASMAS, vol.23, 2016 (SCI-Expanded)
52. **Low-temperature thermostatics of Tamm-Dancoff deformed boson oscillators**  
Algin A., İlik E.  
PHYSICS LETTERS A, vol.377, pp.1797-1803, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- 1. An investigation on protection properties of Tantalum (V) oxide reinforced glass screens on unexposed breast tissue for mammography examinations**  
Alan H., Almisned G., Yılmaz A., Susam L., İlik E., Kılıç G., Ozturk G., Tuysuz B., Akkus B., Tekin H.  
RADIOGRAPHY, vol.30, no.1, pp.282-287, 2024 (ESCI)
- 2. A Study on the Physical, Optical and Radiation Shielding Capabilities of Phosphate Zinc Telluride Glasses as a Result of ZnO/In<sub>2</sub>O<sub>3</sub> Translocation**  
İlik E.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.11, pp.1686-1699, 2023 (Peer-Reviewed Journal)
- 3. Investigation on Optical Properties of Atmospheric Pressure Plasma Jets of N<sub>2</sub> Gas**  
İlik E., Durmuş Ç., Akan T.  
Adıyaman Üniversitesi Fen Bilimleri Dergisi, vol.10, no.1, pp.326-338, 2020 (Peer-Reviewed Journal)
- 4. Applying on Bacillus cereus of Low-Pressure and Low-Temperature Plasma Jet in a Postdischarge Chamber**  
İlik E., Aytar Çelik P., Toptas Y., Çabuk A., Akan T.  
IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES, vol.1, no.5, pp.468-471, 2017 (ESCI)

## Books & Book Chapters

- 1. Physics I Experiments Laboratory Book for Engineering Students**  
Alğın E., Peker D., İşsever U. G., Kılıç G., Aşıcı C., Baykul M. C., Çetin A., Çetinkaya Çolak S., Eroğlu S., İlik E., et al.  
Eskişehir Osmangazi Üniversitesi, Eskişehir, 2019
- 2. Physics II Experiments Laboratory Book For Engineering Students**  
Alğın E., Peker D., İşsever U. G., Kılıç G., Aşıcı C., Çetinkaya Çolak S., İlik E., Karakaya S., Kaya M., Kellegöz M.  
Eskişehir Osmangazi Üniversitesi, Eskişehir, 2018
- 3. Mühendislik Öğrencileri için Fizik II Deneyleri Laboratuvar Kitabı**  
ALĞIN E., PEKER D., İŞSEVER U. G., KILIÇ G., AŞICI C., ÇETİNKAYA ÇOLAK S., İLİK E., KARAKAYA S., KAYA M., KELLEGÖZ M.  
Eskişehir Osmangazi Üniversitesi, Eskişehir, 2018
- 4. Mühendislik Öğrencileri için FİZİK II DENEYLERİ LABORATUVAR KİTABI**  
ALĞIN E., PEKER D., İŞSEVER U. G., KILIÇ G., AŞICI C., ÇETİNKAYA ÇOLAK S., İLİK E., KARAKAYA S., KAYA M., KELLEGÖZ M.  
Eskişehir Osmangazi Üniversitesi Yayınları No:281, Eskişehir, 2017

## Refereed Congress / Symposium Publications in Proceedings

- 1. INVESTIGATION OF SOME OXIDE COMPOUNDS IN GLASS SYNTHESIS ON SHIELDING PROPERTIES FOR COSMIC RADIATION THROUGH THE OLTARIS PROGRAM**  
Öztürk G., Akkuş B., Almisned G., Yılmaz A., Susam L., Yılmaz Alan H., Kılıç G., İlik E., Tuysuz B., Oktik Ş., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023, BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.3
- 2. ZINC-TELLURITE GLASSES: A BETTER UNDERSTANDING OF THEIR ROLE IN ALPHA-PROTON STOPPING APPLICATIONS: A COMPREHENSIVE STUDY**  
Susam L., Akkuş B., Almisned G., Yılmaz A., Yılmaz Alan H., Kılıç G., İlik E., Öztürk G., Tuysuz B., Oktik Ş., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023, BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.6
- 3. AN OVERVIEW OF LANTHANIDE DOPED GLASSES THROUGH CHARACTERISTIC MATERIAL PROPERTIES IN RADIATION SHIELDING APPLICATIONS**

İlik E., Akkuş B., Almisned G., Yılmaz A., Susam L., Yılmaz Alan H., Kılıç G., Ozturk G., Tuysuz B., Oktik Ş., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023,  
BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.2

4. **OVERVIEW OF CRITICAL MATERIAL PROPERTIES OF GLASS IN RADIATION SHIELDING APPLICATIONS**

Kılıç G., Akkuş B., Almisned G., Yılmaz A., Susam L., Yılmaz Alan H., İlik E., Ozturk G., Tuysuz B., Oktik Ş., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023,  
BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.4

5. **A CLOSER LOOK AT SHIELDING APPLICATIONS OF GLASSES FOR VARIOUS PURPOSES: A METHODOLOGICAL REVIEW**

Tekin H. O., Almisned G., Kılıç G., Akkuş B., Yılmaz A., Susam L., Yılmaz Alan H., İlik E., Öztürk G., Tüysuz B., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023,  
BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.8

6. **PROGRESS IN PROTECTIVE GLASS SHIELDING FOR MAMOGRAPHY SCANS**

Tuysuz B., Akkuş B., Almisned G., Yılmaz A., Susam L., Yılmaz Alan H., Kılıç G., Ozturk G., Oktik Ş., Guler Ö., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023,  
BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.1

7. **APPLICATION OF HIGH ENTROPY ALLOYS (HEAS) IN NUCLEAR REACTOR TECHNOLOGY**

Güler Ö., Tekin H. O., Yılmaz Alan H., Yılmaz A., Almisned G., Susam L., Akkuş B., Kılıç G., İlik E., Oktik Ş., et al.  
TURKISH PHYSICAL SOCIETY 39TH INTERNATIONAL PHYSICS CONGRESS, AUGUST 31 – SEPTEMBER 4, 2023,  
BODRUM/TURKEY, Muğla, Turkey, 31 August - 04 September 2023, pp.7

8. **FARKLI LANTANİT OKSİT KATKILI BOR TABANLI CAMLARIN SEM-EDX VE XRD ANALİZLERİ, RADYASYONDAN KORUMA ÖZELLİKLERİNİ PHY-X PSD YAZILIMI İLE BELİRLENMESİ**

İlik E.

BURSA 3RD International Conference on Scientific Researches, Bursa, Turkey, 22 - 23 October 2022, pp.874

9. **DC MANYETİK SAÇTIRMA SİSTEMİ, TASARIM VE KURULUM SÜREÇLERİ (DC MAGNETRON SPUTTERING SYSTEM, DESIGN AND PRODUCTION PROCESSES)**

İlik E.

MAS 11. ULUSLARARASIMATEMATİK-MÜHENDİSLİK-FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Tokat, Turkey, 13 - 15 March 2020

10. **Sterilization of Bacillus Cereus using cold flowing plasma jet of ambient air at low pressure**

İLİK E., AKAN T.

Turkish Physical Society 33rd International Physics Congress, Bodrum/MUĞLA, Turkey, 6 - 10 September 2017, pp.679

11. **Investigation on variation of OH concentration produced in Argon post-discharge plasma interaction reactor**

İLİK E., AKAN T.

Turkish Physical Society 33rd International Physics Congress, Bodrum/MUĞLA, Turkey, 6 - 10 September 2017, pp.676

12. **Düşük Basıncıta Helyum Gazının Soğuk Akan Deşarj ve Post Deşarj Plazmasının İncelenmesi**

İlik E., Uçar E. F., Akan T.

V. ULUSAL GÜNEŞ VE HİDROJEN ENERJİSİ KONGRESİ, Eskişehir, Turkey, 12 - 13 May 2016

13. **Helyum Gazının Soğuk Atmosferik Basıncı Plazma Jetinin Spektroskopik İncelenmesi**

İLİK E., AKAN T.

ADIM FİZİK GÜNLERİ V, Eskişehir, Turkey, 21 - 23 April 2016

14. **Cold Flowing Plasma with RF of Ar**

Tanışlı M., Şahin N., Mertadam S., Demir S., Akan T., İlik E.

VIII International Conference Plasma Physics and Plasma Technology (PPPT-8), Minsk, Belarus, 14 - 18 September 2015, vol.1

15. **Comparison of optical emission spectrums of cold flowing discharge and the post discharge plasmas of air at low pressure**



İLİK E., AKAN T., ÇAĞRI D., TANIŞLI M., ŞAHİN N., SERCAN M.

5.FİZİKSEL KİMYA KONGRESİ (JOTCSA), Konya, Turkey, 16 - 19 May 2015, vol.2, pp.19-21

16. **Argon Gazının Soğuk Akan Deşarj ve Post Deşarj Plazmasındaki Temel Farklılıkların Düşük Basınçta Belirlenmesi**

AKAN T., İLİK E., TANIŞLI M., ŞAHİN N., MERTADAM S.

Adım Fizik Günleri IV, Kütahya, Turkey, 28 - 29 May 2015

17. **The Three Low Temperature Flowing Post Discharge Systems at Low Pressure**

İLİK E., AKAN T.

1. INTERNATIONAL PLASMA TECHNOLOGIES CONGRESS, Kayseri, Turkey, 28 - 30 April 2014

## Academic and Administrative Experience

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2022 - 2024	<b>Deputy Head of Department</b>	Eskisehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ
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## Courses

PARTICLE PHYSICS I, Postgraduate, 2022 - 2023

WAVES AND OPTICS LABORATORY, Undergraduate, 2022 - 2023

PHYSICS I, Undergraduate, 2022 - 2023

Physics I Lab (B), Undergraduate, 2021 - 2022

Physics, Undergraduate, 2021 - 2022

Physics I Lab (A), Undergraduate, 2021 - 2022

Physics I Lab (B), Undergraduate, 2021 - 2022

Physics I Lab (A), Undergraduate, 2021 - 2022

Physics I Lab., Undergraduate, 2021 - 2022

Physics II Lab.(A), Undergraduate, 2017 - 2018

Physics I Lab.(A), Undergraduate, 2017 - 2018

## Memberships / Tasks in Scientific Organizations

Turkish Physics Association, Member, 2016 - 2017, Turkey

## Scientific Refereeing

MATERIALS LETTERS, SCI Journal, November 2022

APPLIED SCIENCES-BASEL, SCI Journal, July 2022

MATERIALS, SCI Journal, April 2022

JAPA- Journal of Anatolian Physics and Astronomy, Other Journals, April 2022

MATERIALS, SCI Journal, March 2022

MATERIALS, SCI Journal, February 2022

PHYSICA B-CONDENSED MATTER, SCI Journal, July 2021

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, SCI Journal, July 2021

IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, April 2020

IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, January 2020

IEEE TRANSACTIONS ON PLASMA SCIENCE, SCI Journal, January 2019

FOUNDATIONS OF PHYSICS, SCI Journal, May 2014

## Scientific Research / Working Group Memberships

Amorf Yarıiletken Malzemeler Üretim Ve Araştırma Laboratuvarı, Eskisehir Osmangazi University, Turkey,  
<https://avesis.ogu.edu.tr/arastirma-grubu/ayalab>, 2014 - Continues

## Metrics

Publication: 78  
Citation (WoS): 802  
Citation (Scopus): 1023  
H-Index (WoS): 19  
H-Index (Scopus): 20

## Congress and Symposium Activities

Turkish Physical Society 39th International Physics Congress, Attendee, Muğla, Turkey, 2023  
BURSA 3RD International Conference on Scientific Researches, Attendee, Bursa, Turkey, 2022  
MAS 11th International Congress on Mathematics, Engineering, Natural & Medical Sciences, Attendee, Tokat, Turkey, 2020  
Turkish Physical Society 33rd International Physics Congress, Attendee, Muğla, Turkey, 2017  
VIII International Conference Plasma Physics and Plasma Technology (PPPT-8), Attendee, Minsk, Belarus, 2015  
Adım Fizik Günleri IV, Attendee, Kütahya, Turkey, 2015  
5.FİZİKSEL KİMYA KONGRESİ, Attendee, Konya, Turkey, 2015  
1. INTERNATIONAL PLASMA TECHNOLOGIES CONGRESS, Attendee, Kayseri, Turkey, 2014

## Research Areas

Physics, High Energy Physics, Physics, Materials Science, Physics of Plasmas