

## Asst. Prof. Esra CİNAN

### Personal Information

Web: <https://avesis.atauni.edu.tr/esra.dari>

### International Researcher IDs

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### Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Atom Ve Molekül Fiziği, Turkey 2012 - 2018

Undergraduate, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Fizik Öğretmenliği, Turkey 2006 - 2010

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Occupational Health and Safety, Temel İş Sağlığı ve İş Güvenliği Eğitimi, Ataturk Üniversitesi, 2016

Science and Technology Policy, Bilgilendirme ve Eğitim Semineri, TÜBİTAK, 2011

### Dissertations

Doctorate, LANTANİTLERDE X-IŞINI BAĞIL ŞİDDETLERİNE SICAKLIĞIN ETKİSİNİN İNCELENMESİ , Ataturk Üniversitesi, Fen Bilimleri Enstitüsü, Atom Ve Molekül Fiziği, 2018

### Research Areas

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

### Academic Titles / Tasks

Assistant Professor, Ataturk University, Fen Fakültesi, Fizik, 2022 - Continues

Research Assistant PhD, Ataturk University, Fen Fakültesi, Fizik, 2018 - 2022

Research Assistant, Ataturk University, Fen Fakültesi, Fizik, 2011 - 2018

### Academic and Administrative Experience

Head of Department, Ataturk University, Fen Fakültesi, Fizik, 2023 - Continues

## Courses

Temel Fizik, Undergraduate, 2023 - 2024

Temel Fizik, Undergraduate, 2023 - 2024

Temel Fizik Laboratuvarı, Undergraduate, 2023 - 2024

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

- I. **Determination of protective properties of some drug-active compounds against gamma radiation damage**  
Aygün B., Akincioglu A., CİNAN E., SOLA V., Cagan A., Ceyran E., DURNA D., Sayyed M.  
PRAMANA-JOURNAL OF PHYSICS, vol.97, no.4, 2023 (SCI-Expanded)
- II. **Investigation of radiation protective features of azadispiro derivatives and their genotoxic potential with Ames/Salmonella test system**  
Alaylar B., Aygun B., TURHAN K., KARADAYI M., CİNAN E., TURGUT Z., KARADAYI G., Abu Al-Sayyed M. I., GÜLLÜCE M., KARABULUT A.  
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.99, no.2, pp.245-258, 2023 (SCI-Expanded)
- III. **Determination of biological radioprotective characteristics of some natural organic compounds for radiation shielding applications**  
AYGÜN B., ŞENTÜRK M., CİNAN E., Simsek Ö., Abu Al-Sayyed M. I., KARABULUT A.  
RADIOCHIMICA ACTA, vol.110, no.11, pp.925-936, 2022 (SCI-Expanded)
- IV. **Effective atomic numbers of boron compounds obtained using Rayleigh to compton scattering intensity ratio**  
CİNAN E., YILMAZ D.  
APPLIED RADIATION AND ISOTOPES, vol.174, 2021 (SCI-Expanded)
- V. **Determination of the effect of temperature on relative L X-ray intensity ratio of gadolinium, dysprosium and erbium**  
CİNAN E., ERTUĞRUL M., AYGÜN B., Sayyed M., KURUCU Y., ÖZDEMİR Y.  
RADIATION PHYSICS AND CHEMISTRY, vol.183, 2021 (SCI-Expanded)
- VI. **Development and production of metal oxide doped glasses for gamma ray and fast neutron shielding**  
Aygün B., ŞAKAR E., CİNAN E., Yorgun N. Y., Sayyed M., Agar O., KARABULUT A.  
RADIATION PHYSICS AND CHEMISTRY, vol.174, 2020 (SCI-Expanded)
- VII. **Synthesis of CuO-graphene nanocomposite material and the effect of gamma radiation on CuO-graphene/p-Si junction diode**  
Orhan Z., Cinan E., Caldırın Z., Kurucu Y., Daş E.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.15, pp.12715-12724, 2020 (SCI-Expanded)
- VIII. **Measurement of L X-ray production cross sections and relative intensities of some lanthanide compounds depending on the temperature**  
CİNAN E., Aygün B., SAYYED M., ÖZDEMİR Y.  
RADIOCHIMICA ACTA, vol.108, no.5, pp.415-423, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Determination of Mass Attenuation Coefficients on Boric Acid Injected Liver of Male Rats**  
EKİNCİ N., DURAK R., KAVAZ E., GEYİKOĞLU F., CİNAN E.  
International Journal of Scientific Engineering Research, vol.9, pp.5-8, 2018 (Peer-Reviewed Journal)
- II. **Determination of radon concentration by using CR-39 plastic track detectors in dwellings of Bingöl and Mus provinces of Turkey**

- Koc P., EKİNCİ N., CİNAN E., KAVAZ E.  
Asian Journal of Chemistry, vol.30, no.1, pp.226-230, 2018 (Scopus)
- III. **Calculation of photopeak efficiency of Si(Li) detector within the energyrange of 1-80 KeV**  
KAVAZ E., EKİNCİ N., CİNAN E., ÖZDEMİR Y.  
Journal of Baku Engineering University PHYSICS, 2017 (Peer-Reviewed Journal)
- IV. **Measurements of indoor 222Rn in Iğdır, Turkey with CR-39 detectors**  
EKİNCİ N., KAVAZ E., CİNAN E.  
Asian Journal of Chemistry, vol.28, no.4, pp.921-926, 2016 (Scopus)
- V. **Elemental analysis of six mines in Erzincan region using wavelength-dispersive X-ray fluorescence spectrometry**  
Ekinci N., Kavaz E., Cinan E., Sevindı C.  
Asian Journal of Chemistry, vol.28, no.3, pp.489-492, 2016 (Scopus)
- VI. **ELEMENTAL ANALYSIS OF ANALGESIC DRUGS USING WAVELENGTH DISPERSIVE X RAY FLUORESCENCE SPECTROMETRY**  
EKİNCİ N., KAVAZ E., CİNAN E., ÖMER FARUK A.  
INTERNATIONAL JOURNAL OF RESEARCH IN PHARMACY AND CHEMISTRY, 2014 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Neutron Measurements for Ferro Boron Alloys and Experimental Determination of Radiation Properties**  
Levet A., Cinan E., Kavaz E., Özdemir Y.  
4th International Turkish Congress on Molecular Spectroscopy (TURCMOS2019), Aydin, Turkey, 5 - 09 August 2019, pp.43
- II. **Comparison of Radiation Parameters of Stainless Steels 316L, 310, 304, 430 for Different Energies**  
Levet A., Cinan E., Kavaz E., Özdemir Y.  
4th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL APPLIED SCIENCE PHYSICS, Ağrı, Turkey, 19 - 22 June 2019
- III. **Measurements L X-ray Production Cross-Sections and Intensity Ratios for Tm2O3 Compound Depending on the Temperature**  
CİNAN E., LEVET A., EKİNCİ N., ŞAKAR E., KURUCU Y., ÖZDEMİR Y.  
3rd International Conference on Material Science and Technology in Cappadocia (IMSTEC'18), Nevşehir, Turkey, 17 - 19 September 2018, pp.353-359
- IV. **EFFECT OF THE TEMPERATURE VARIATION ON L X-RAY INTENSITY RATIOS AND L X-RAY PRODUCTION CROSS-SECTIONS OF PR6O11COMPOUND**  
Cinan E., Levet A., Ekinci N., Şakar E., Kurucu Y., Özdemir Y.  
3rd International Conference on Material Science and Technology in Cappadocia (IMSTEC'18), Nevşehir, Turkey, 17 - 19 September 2018, pp.657-661
- V. **Determination of gamma ray shielding parameters for some lead compounds**  
Levet A., Cinan E., Kavaz E., Köç Bakacak P., Kurucu Y., Ekinci N., Özdemir Y.  
TFD34, Muğla, Turkey, 5 - 09 September 2018
- VI. **The importance of erbium and boron compounds for radiation shielding in nuclear power plants**  
Levet A., Köç Bakacak P., Cinan E., Kavaz E., Kurucu Y., Ekinci N., Özdemir Y.  
TFD34, Muğla, Turkey, 5 - 09 September 2018, pp.408
- VII. **The buildup factor change depending on collimator diameter for some chemical samples**  
Levet A., Cinan E., Ekinci N., Özdemir Y.  
International Congress of Science, Education and Technology Research, Odessa, Ukraine, 10 - 12 August 2018, pp.132
- VIII. **Investigation of some radiation shielding parameters for different boron fractions in iron boron alloys**

- Levet A., Ekinci N., Cinan E., Özdemir Y.  
International Congress of Science, Education and Technology Research, Odessa, Ukraine, 10 - 12 August 2018,  
pp.131
- IX. **Determination of Mass Attenuation Coefficients on Boric Acid Injected Liver of Male Rats**  
EKİNCİ N., DURAK R., CİNAN E., KAVAZ E., GEYİKOĞLU F.  
3rd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL APPLIED SCIENCEPHYSICS, Antalya, Turkey, 9 -  
12 May 2018, pp.128
- X. **Elemental Analysis on Livers following Boric Acid and Propolis Exposure in Adult Srage Dawley Rat  
Using Wavelength-Dispersive X-Ray Fluorescence Spectrometry**  
Kavaz E., Durak R., Cinan E., Boydaş E., Özdemir Y., Ekinci N., Koç K.  
3rd INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL APPLIED SCIENCEPHYSICS, Antalya, Turkey, 9 -  
12 May 2018, pp.129
- XI. **MEASUREMENT OF L $\beta$  / L $\alpha$  INTENSITY RATIO OF Ho2O3 COMPOUND AT DIFFERENT TEMPERATURES**  
CİNAN E., LEVET A., EKİNCİ N., KAVAZ E., ÖZDEMİR Y.  
4TH INTERNATIONAL CONFERENCE ON PURE AND APPLIED SCIENCE :RENEWABLE ENERGY, İstanbul, Turkey, 23  
- 25 November 2017, pp.113
- XII. **MEASUREMENT OF L $\beta$  / L $\alpha$  INTENSITY RATIO OF Ce2O3 COMPOUND AT DIFFERENT TEMPERATURES**  
Cinan E., Levet A., Ekinci N., Kavaz E., Özdemir Y.  
4th International Conference on Pure and Applied Sciences: Renewable Energy, İstanbul, Turkey, 23 - 25  
November 2017, pp.113
- XIII. **Comparisons of Placenta Samples Taken from Normal Birth and Preeclampsia Birth Using  
Wavelength Dispersive X-Ray Fluorescense Spectroscopy Technique**  
Levet A., Cinan E., Büyükyıldız M., Özdemir Y.  
8TH INTERNATIONAL ADVANCEDTECHNOLOGIES SYMPOSIUM, Elazığ, Turkey, 19 - 22 October 2017, pp.199
- XIV. **Measurement of L $\beta$  / L $\alpha$  Intensity Ratio of Sm<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub> Compound at Different Temperatures**  
Cinan E., Levet A., Ekinci N., Kavaz E., Özdemir Y.  
8th International Advanced Technologies Symposium (IATS) 2017, Elazığ, Turkey, 19 - 22 October 2017, pp.225
- XV. **MEASUREMENT OF L $\beta$  / L $\alpha$  INTENSITY RATIO OF Sm<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub> COMPOUND AT DDIFFERENT  
TEMPERATURE**  
CİNAN E., LEVET A., EKİNCİ N., KAVAZ E., ÖZDEMİR Y.  
IATS'xx17, 19 - 22 October 2017
- XVI. **PHOTON INTERACTION PARAMETERS OF BORON CARBIDE(B4C), BORON OXIDE (B2O3) AND BORON  
NITRIDE (BN) IN THE ENERGY REGION 1 KEV-100 GEV**  
LEVET A., BÜYÜKYILDIZ M., CİNAN E., KAVAZ E., ÖZDEMİR Y.  
TURKISH PHYSICAL SOCIETY 33. INTERNATIONAL PHYSICS CONGRESS, BODRUM, Turkey, 6 - 10 September 2017,  
pp.257
- XVII. **ELEMENTAL ANALYSIS OF HUMAN PLACENTA AND RELATIONSHIP BETWEEN NEWBORN WEIGHT  
AND TRACE ELEMENTS**  
Levet A., Cinan E., Büyükyıldız M., Özdemir Y.  
Turkish Physical Society 33rd International Physics Congress (TFD33), Muğla, Turkey, 6 - 10 September 2017,  
pp.431
- XVIII. **Measurement of Lbeta Lalpah Intensity ratios of some lanthanide elements at different temperatures**  
CİNAN E., KAVAZ E., EKİNCİ N., ULUSOY Ö., ÖZDEMİR Y.  
IPCAP 2016, 25 - 27 February 2016
- XIX. **Measurement of L L Intensiy Ratios of Some Lanthanide Elements at Different Temperatures**  
CİNAN E., KAVAZ E., EKİNCİ N., ÖZLEM u., ÖZDEMİR Y.  
IPCAP 2016, 25 - 27 February 2016
- XX. **Calculation of gamma ray buildup factorsfor some alloys**  
ULUSOY Ö., EKİNCİ N., KAVAZ E., AYGÜN B., CİNAN E.  
IPCAP 2016, 25 - 27 February 2016
- XXI. **Evaluation of energy absorption and exposure buildup factors by using GP fitting aproximation for**

**someradioprotectors**

KAVAZ E., EKİNCİ N., ÖZDEMİR Y., CİNAN E., ULUSOY Ö.

IPCAP 2016, 25 - 27 February 2016

- XXII. **ANALYSIS OF ÇAKŞIR PLANTS FERULA COMMUNIS WITH ENERGY DISPERSIVE X RAY FLUORESCENCE**  
ULUSOY Ö., KAVAZ E., EKİNCİ N., CİNAN E.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION, 24 - 27 August 2015
- XXIII. **INVESTIGATION ON PHOTON INTERACTION PARAMETERS OF POLYMERS USED NUCLEAR TRACK DETECTORS**  
KAVAZ E., CİNAN E., ULUSOY Ö., ÖZDEMİR Y., EKİNCİ N.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION, 24 - 27 August 2015
- XXIV. **DETERMINATION OF THE MASS ATTENUATION COEFFICIENT EFFECTIVE ATOMIC NUMBER AND ELECTRON DENSITY OF DIFFERENT SEMICONDUCTOR MATERIALS**  
CİNAN E., ÖZLEM U., EKİNCİ N., KAVAZ E.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION, 24 - 27 August 2015
- XXV. **INDOOR RADON MEASUREMETS IN MUŞ TURKEY WITH CR 39 DETECTORS**  
ULUSOY ö., EKİNCİ N., SENEMTAŞI ÜNAL E., KAVAZ E., CİNAN E.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION, 24 - 27 August 2015
- XXVI. **DETERMINATION OF 222RN ACTIVITIY CONCENTRATION OF INDOOR ENVIRONMENTS IN BINGOL PROVINCE WITH CR 39 NUCLEAR TRACE DETECTORS**  
CİNAN E., KAVAZ E., EKİNCİ N., ULUSOY Ö., ÖZDEMİR Y.  
9th INTERNATIONAL PHYSICS CONFERENCE OF THE BALKAN PHYSICAL UNION, 24 - 27 August 2015
- XXVII. **CALCULATION OF PHOTOPEAK EFFICIENCY OF Si Li DETECTOR WITHIN THE ENERGY RANGE OF 1 80 KEV**  
KAVAZ E., CİNAN E., Ahmadishabad N., ÖZDEMİR Y.  
30. TFD, 2 - 05 September 2013, vol.30, pp.336
- XXVIII. **A STUDY ONDETERMINATION OF ANISOTROPYPARAMETERS OF SOMEELEMENTS**  
KAVAZ E., AHMADISHADBAD N., CİNAN E., ÖZDEMİR Y.  
30.ULUSLARARASI FİZİK KONGRESİ, 2 - 05 September 2013
- XXIX. **A STUDY ON DETERMINATION OF ANISOTROPY PARAMETERSOF SOME ELEMENTS IN THE ATOMIC RANGE 65 Z 92**  
KAVAZ E., AHMADISHADBAD N., CİNAN E., ÖZDEMİR Y.  
30. TFD, 2 - 05 September 2013, vol.30, pp.337

## **Other Publications**

I. **Physics Laboratory I**

Gürol A., Yılmaz D., Kavaz E., Fidan M., Cinan E., Güney Y., Kalecik S., Tok E.  
Experiment, pp.1-56, 2023

## **Supported Projects**

- LEVET A., EKİNCİ N., ÖZDEMİR Y., CİNAN E., KAVAZ E., GÜL M., Project Supported by Higher Education Institutions, Demir Bor Alaşımlarında Bor Elementinin Radyasyon Zırhlamasına Etkilerinin Araştırılması ve Foton Etkileşim parametrelerinin Belirlenmesi, 2017 - 2020
- Durak R., Cinan E., Project Supported by Higher Education Institutions, International Physics Conference at the Anatolian Peak, IPCAP 2016, 2015 - 2016
- Ekinci N., Kavaz E., Cinan E., Project Supported by Higher Education Institutions, Doğu Anadolu Bölgesinde Bulunan Kaplıca ve İçme Sularında Bulunan Radon Konsantrasyonlarının Belirlenmesi, 2014 - 2015
- Durak R., Cinan E., Project Supported by Higher Education Institutions, Temel fizik labaratuvarının güncellenmesi ve

yenilenmesi, 2014 - 2015

Özdemir Y., Cinan E., Project Supported by Higher Education Institutions, İNSAN VÜCUDUNDAKİ KURŞUN MİKTARININ İN VIVO OLARAK XRF TEKNİĞİ İLE BELİRLENMESİ VE KURŞUNUN SAĞLIĞA ETKİLERİNİN ARAŞTIRILMASI, 2011 - 2013

## Tasks In Event Organizations

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., Sarac Y., et al., 1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021) , Scientific Congress, Erzurum, Turkey, Eylül 2021  
Sağsöz M. E., Bayrakçeken H., Nişancı B., Erkayman B., Dağcı Kiranşan K., Nadaroğlu H., Usanmaz B., Bozkurt F., Gür E., Dal D., et al., 2nd International Symposium on Applied Sciences and Engineering (ISASE2021), Scientific Congress, Erzurum, Turkey, Nisan 2021  
Cinan E., International physics conference at the anatolian peak, IPCAP 2016 , Scientific Congress, Turkey, Şubat 2016

## Metrics

Publication: 44

Citation (WoS): 44

Citation (Scopus): 62

H-Index (WoS): 3

H-Index (Scopus): 4

## Scholarships

Yurt içi Doktora Bursu, TUBITAK, 2011 - 2016