

## Lect. PhD TUĞBA BAYAZIT

### Personal Information

**Office Phone:** [+90 464 223 6126](tel:+904642236126) Extension: 1951

**Email:** [tugba.bayazit@erdogan.edu.tr](mailto:tugba.bayazit@erdogan.edu.tr)

**Web:** <https://avesis.erdogan.edu.tr/tugba.bayazit>

### International Researcher IDs

ScholarID: [jwvTgQgAAAAJ](https://orcid.org/0000-0002-8695-0298)

ORCID: 0000-0002-8695-0298

Publons / Web Of Science ResearcherID: K GK-6180-2024

ScopusID: 57209243130

Yoksis Researcher ID: 42615

### Education Information

Doctorate, Recep Tayyip Erdogan University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2015 - 2021

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2007 - 2011

Undergraduate, Karadeniz Technical University, Fatih Eğitim Fakültesi, Orta Öğretim Fen-Matematik Alanları Eğitimi, Turkey 2002 - 2007

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, TS EN ISO/IEC 17025 Standardı Eğitimi, TSE Enstitüsü Deney ve Kalibrasyon Başkanlığı, 2014

Education Management and Planning, XRD ve Rietveld- Çimento Uygulamaları Eğitimi, Türkiye Çimento Müstahsilleri Birliği, 2014

Education Management and Planning, Low Temperature Pl/PLE/RT System and Troubleshoot Cihaz, Recep Tayyip Erdoğan Üniversitesi, 2014

Education Management and Planning, Rigaku SmartLAB X-Ray Difraktometresi Cihazı Eğitimi, Tekser A.Ş., 2013

Education Management and Planning, JEOL JSM-6610 Cihazı sertifika Eğitimi, Recep Tayyip Erdoğan Üniversitesi, 2013

Education Management and Planning, TS EN ISO/IEC 17025 Standardı Eğitimi, Recep Tayyip Erdoğan Üniversitesi, 2012

Education Management and Planning, X-Ray Difraktometre Data Collector ve High Score Plus Software Eğitimi, X-Ray Difraktometre Eğitimi, Çanakkale Seramik AR-GE Laboratuvarı, 2012

Education Management and Planning, Spring School & Educational Courses, İnönü Üniversitesi, 2010

Education Management and Planning, International Student Workshop on Condensed Matter and Materials Physics, İnönü üniversitesi, 2009

### Dissertations

Doctorate,  $Cu_2Sn(S,Se)_3$  ince filmlerinin üretilmesi ve aygıt özelliklerinin incelenmesi, Recep Tayyip Erdogan University,

Fen Bilimleri Enstitüsü, Fizik (Dr), 2021

Postgraduate, SiC katkılı MgB<sub>2</sub> süperiletkeninin yapısal ve manyetik özellikleri, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik/Katıhal Fiziği, 2011

Postgraduate, Kırılma ve Mercekler Konularında Çoklu Zeka Kuramı Kapsamında Beyin Fırtınası Tekniği ve Tartışma Yöntemine Uygun Geliştirilen Öğretim Materyallerinin Uygulanması ve Değerlendirilmesi, Karadeniz Technical University, Fatih Eğitim Fakültesi, Ortaöğretim Fen Matematik Alanları- Fizik Eğitimi, 2007

## Research Areas

Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Surfaces, Interfaces, Thin Films and Nanosystems, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Superconductivity, Natural Sciences

## Academic Titles / Tasks

Lecturer, Recep Tayyip Erdogan University, Rektörlük, Merkezi Araştırma Uygulama Ve Araştırma Merkezi, 2013 - Continues

Lecturer, Hakkari University, Faculty Of Education, Fen Bilgisi Eğitimi, 2010 - 2011

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

- I. **Triple layer TiO<sub>2</sub>/HfO<sub>2</sub>/SiO<sub>2</sub> thin film design for reduction of optical losses**  
Bayazit T., Kanmaz I., Tomakin M., Uzun A.  
PHYSICA SCRIPTA, pp.1-10, 2025 (SCI-Expanded)
- II. **Improvement in performance of SnSe-based photodetectors via post deposition sulfur diffusion**  
Yılmaz S., Başol B. M., Polat İ., Olğar M. A., Bayazit T., Küçükömeroğlu T., Bacaksız E.  
Sensors and Actuators A: Physical, vol.372, 2024 (SCI-Expanded)
- III. **Growth and characterization of CT(S,Se) thin films and Al/n-Si/p-CT(S,Se)/Mo heterojunction diode application employing a two-stage process**  
Bayazit T., Olğar M. A., Küçükömeroğlu T., Bacaksız E., Tomakin M.  
Sensors and Actuators A: Physical, vol.363, 2023 (SCI-Expanded)
- IV. **Changing the conductivity type of ultrasonically sprayed ZnO thin films: comparison of the effects of Li, N, and B dopants**  
Bayazit T., Güner S. B., Tomakin M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.34, no.31, pp.1-16, 2023 (SCI-Expanded)
- V. **Growth and characterization of Cu<sub>2</sub>SnS<sub>3</sub> (CTS), Cu<sub>2</sub>SnSe<sub>3</sub> (CTSe), and Cu<sub>2</sub>Sn(S,Se)<sub>3</sub> (CTSSe) thin films using dip-coated Cu-Sn precursor**  
Bayazit T., Olğar M. A., Küçükömeroğlu T., Bacaksız E., Tomakin M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.13, pp.12612-12618, 2019 (SCI-Expanded)
- VI. **Properties of MgB<sub>2</sub> Thin Films Deposited on Different Substrates Prepared by Ex-Situ Annealing Process**  
Koparan E. T., Öztürk A., Bayazit T., Surdu A., Sidorenko A., Yanmaz E.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.2, pp.267-271, 2013 (SCI-Expanded)
- VII. **The Magnetic and Structural Properties of SiC-Doped MgB<sub>2</sub> Bulks Prepared by the Standard Ceramic Processing**  
Dilek T., Koparan E. T., Basoglu M., Yanmaz E.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.495-497, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Production of Sustainable Low-Layer Graphene by Green Synthesis at Room Conditions for Platinum-Based Direct Methanol Fuel Cell**  
Erduran V., Bayat R., Işık İ., Bayazit T., Şen F.  
ACS Engineering Au, 2023 - ACS Publications, 2023 (Peer-Reviewed Journal)
- II. **Measurement of Mass Attenuation Coefficients and Effective Atomic Numbers for MgB<sub>2</sub>-xSiC<sub>x</sub> (%5) Superconductor Using X-Ray Energies**  
Bayazit T., Aksoy C.  
Journal of Investigations on Engineering and Technology, vol.2, no.1, pp.1-7, 2019 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **Effect Of Thickness Of Double Layer TiO<sub>2</sub>/Al<sub>2</sub>O<sub>3</sub> Antireflection Coating On Crystal Silicon Solar Cell**  
Bayazit T., Kanmaz İ.  
EGE 12th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, İzmir, Turkey, 26 - 30 December 2024, pp.1-2
- II. **Doğu Karadeniz Bölgesi' nde yetiştirilen farklı çay çeşitlerinde flor içeriğinin incelenmesi**  
Kurt A., Menteş A. R., Tüzüner T., Bayazit T., Bektaş I., Akçay G.  
Ulusal Çay Kongresi, Rize, Turkey, 21 - 23 May 2024, pp.1
- III. **Modulation Properties of Cu<sub>2</sub>Sn(S<sub>x</sub>Se<sub>1-x</sub>)<sub>3</sub> Thin Films Through Various Reaction Temperatures Using Rapid Thermal Processing**  
BAYAZIT T., OLGAR M. A., TOMAKIN M., KÜÇÜKÖMEROĞLU T., BACAĞSIZ E.  
6th International conference on materials science and nanotechnology for next generation (MSNG2019), 16 - 18 October 2019, pp.44
- IV. **Effects of Acceptor Dopants (Li, N, B) on ZnO Thin Film Prepared by Spray Pyrolysis**  
BAYAZIT T., OLGAR M. A., GÜNER S. B., TOMAKIN M., BACAĞSIZ E.  
6th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2019), 16 - 18 October 2019
- V. **EFFECT OF SULFURIZATION TEMPERATURE ON STRUCTURAL PROPERTIES OF Cu<sub>2</sub>SnS<sub>3</sub> THIN FILMS**  
BAYAZIT T., TOMAKIN M., OLGAR M. A., KÜÇÜKÖMEROĞLU T., BACAĞSIZ E.  
KARADENİZ 1. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMA KONGRESİ, Giresun, Turkey, 15 - 17 March 2019, pp.164-165
- VI. **Investigation of Some Physical Properties of Boron Doped CdS Thin Films Irradiated with Cs 137**  
Bozali F., TOMAKIN M., KESKENLER E. F., BAYAZIT T., NEVRUZOĞLU V.  
International Physics Conference at the Anatolian Peak, 25 - 27 February 2016
- VII. **Fabrication and Characterization of Superconducting MgB<sub>2</sub> Thin Film**  
TAYLAN KOPARAN E., BAYAZIT T., BAŞOĞLU M., ANDREI S., SIDORENKO A., YANMAZ E.  
5th National Superconductivity Symposium, İzmir, Turkey, 3 July - 06 August 2011
- VIII. **Effect of Flux Pinning Properties Of SiC-doped MgB<sub>2</sub> Superconductors**  
Bayazit T., Taylan Koparan E., Başoğlu M., Hacısalıhoğlu M. Y., Yanmaz E.  
International Student Workshop on Condensed Matter and Material Physics, Antalya, Turkey, 27 - 31 December 2009, pp.47
- IX. **Superconducting Properties of Pure and SiC doped Bulk MgB<sub>2</sub> Superconductors**  
BAYAZIT T., BAŞOĞLU M., TAYLAN KOPARAN E., HACISALİHOĞLU M. Y., YANMAZ E.  
4. Ulusal Süperiletkenler Sempozyumu, Trabzon, Turkey, 10 August 2009

## Supported Projects

KURT A., BAYAZIT T., AKÇAY G., MENTEŞ A. R., TÜZÜNER T., BEKTAŞ I., Project Supported by Higher Education

Institutions, Doğu Karadeniz Bölgesi' nde yetiştirilen farklı çay çeşitlerinde flor içeriğinin incelenmesi, 2023 - Continues  
TOMAKİN M., BAYAZIT T., Project Supported by Higher Education Institutions, Cu<sub>2</sub>Sn(S,Se)<sub>3</sub> İnce Filmlerinin Üretilmesi  
ve Aygıt Özelliklerinin İncelenmesi, 2018 - 2021

TOMAKİN M., GÜNER S. B., BAYAZIT T., Project Supported by Higher Education Institutions, p-Tipi ZnO İnce Film  
Örneklerinin Ultrasonik Kimyasal Püskürtme Yöntemi ile Hazırlanması ve Kararlılığının İncelenmesi, 2018 - 2021

AKÇAY H. T., ŞİRİN M., TOKÇALAR S., DEMİR A., BAYAZIT T., Project Supported by Higher Education Institutions, Çeşitli  
Organik ve İnorganik Bileşiklerin, Doğal Ürünlerin Spektroskopik İncelenmesi, 2014 - 2017

## Metrics

Publication: 18

Citation (WoS): 22

Citation (Scopus): 24

H-Index (WoS): 2

H-Index (Scopus): 2

## Congress and Symposium Activities

E. Taylan Koparan, A. Ozturk, T. Bayazit, A. Surdu, A. Sidorenko, E. Yanmaz, "Investigation of the Upper Critical Magnetic  
Field and Activation Energy in MgB<sub>2</sub> Thin Film" III. International Conference on Superconductivity and Magnetism  
(ICSM2012) , Kumburgaz, İstanbul, TURKEY - 4 Mayıs 2012, Attendee, İstanbul, Turkey, 2012

E. Taylan Koparan, T. Bayazit, M. Başoğlu, A. Surdu, A.Sidorenko and E.Yanmaz, "Fabrication and Characterization of  
Superconducting MgB<sub>2</sub> Thin Film" 5th National Superconductivity Symposium , İzmir - 6 Tem. 2011, Attendee, İzmir,  
Turkey, 2011

T. Dilek, E. Yanmaz, "The Magnetic and Structural Properties of SiC-Doped MgB<sub>2</sub> Bulks Prepared by the Standard  
Ceramic Processing", International Conference on Superconductivity and Magnetism , Antalya, TURKEY - 30 Nisan 2010,  
Attendee, Antalya, Turkey, 2010

T. Dilek, E. Taylan Koparan, E. Yanmaz, "Effect of Flux Pinning Properties Of SiC- doped MgB<sub>2</sub> Supreconductors" ISW on  
Condensed Matter and Material Physics , Antalya-TURKEY - 31 Ara. 2009, Attendee, Antalya, Turkey, 2009

T. Dilek, M. Başoğlu, E. Taylan Koparan, M.Y. Hacısalıhoğlu, E. Yanmaz, "Superconducting Properties of Pure and SiC-  
doped Bulk MgB<sub>2</sub> Superconductors" 4. Ulusal Süperiletkenler Sempozyumu , Trabzon - 13 Ağu. 2009, Working Group,  
Trabzon, Turkey, 2009

## Scholarships

2211-c yurtiçi öncelikli alanlar doktora burs programı, TÜBİTAK, 2019 - 2021

## Awards

Bayazit T., Tübitak 2211-C Yurtiçi Öncelikli Alanlar Doktora Bursu, Tübitak, July 2021