

# **Prof. ALİ ÖZTÜRK**

## **Personal Information**

**Office Phone:** [+90 462 377 2548](tel:+904623772548)

**Fax Phone:** [+90 462 325 3197](tel:+904623253197)

**Email:** ozturk@ktu.edu.tr

**Web:** <https://avesis.ktu.edu.tr//ozturk>

## **International Researcher IDs**

ORCID: 0000-0002-5274-2140

Publons / Web Of Science ResearcherID: AAT-4604-2020

Yoksis Researcher ID: 151852

## **Education Information**

Doctorate, Karadeniz Technical University, -, Fizik, Turkey 1999 - 2005

Postgraduate, Karadeniz Technical University, -, Fizik, Turkey 1995 - 1999

Undergraduate, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Fizik, Turkey 1991 - 1995

## **Foreign Languages**

English, B2 Upper Intermediate

## **Research Areas**

Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Superconductivity, Natural Sciences

## **Academic Titles / Tasks**

Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2021 - Continues

Associate Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2012 - 2021

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2006 - 2012

## **Advising Theses**

Öztürk A., IMPROVEMENT OF MAGNETIC SHIELDING PROPERTIES OF HOLLOW CYLINDRICAL HIGH TEMPERATURE SUPERCONDUCTORS USING THE FINITE ELEMENT METHOD, Doctorate, K.A.(Student), 2021

ÖZTÜRK A., YBaCuO (123) SÜPERİLETKEN SİSTEMİNDE Y YERİNE KISMİ Dy KATKISININ ETKİLERİNİN İNCELENMESİ, Postgraduate, D.M.(Student), 2011

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

- I. **Remanent Magnetization in a Y<sub>0.5</sub>Lu<sub>0.5</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Superconductor: Experimental Studies and Numerical Computations Using H-Formulation**  
Celebi S., Karaahmet Z., Öztürk A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.37, no.3, pp.499-508, 2024 (SCI-Expanded)
- II. **Specification of Some Superconductivity Parameters by Adding Lutetium to the YBCO (358) Ceramic Superconductor**  
Basoglu M., Duzgun I., ÖZTÜRK A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.34, no.4, pp.1077-1084, 2021 (SCI-Expanded)
- III. **Theoretical Study of the Effect of Magnetic Field Sweep Rate and Temperature on Shielding Efficiency in a Bulk Tube-Shaped HTS**  
ÖZTÜRK A., Kara A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.33, no.11, pp.3411-3416, 2020 (SCI-Expanded)
- IV. **Comparative Investigation on Magnetic Behavior of Partial Rare Earth Element (Re: Lu, Yb, and Dy) Substituted Y<sub>0.5</sub>Re<sub>0.5</sub>BCO (123) Superconductors**  
ÖZTÜRK A., Duzgun I., Basoglu M., Celebi S.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.33, no.3, pp.583-590, 2020 (SCI-Expanded)
- V. **Effect of DC Field on AC-Loss Peak in a Commercial Bi:2223/Ag tape**  
ÖZTÜRK A., Düzgün İ., ÇELEBİ S.  
EUROPEAN PHYSICAL JOURNAL B, vol.80, pp.30601, 2017 (SCI-Expanded)
- VI. **The Effect of Dy Doping on the Magnetic Behavior of YBCO Superconductors**  
Ozturk A., Dogan M., Düzgün İ., Celebi S.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.29, no.7, pp.1787-1791, 2016 (SCI-Expanded)
- VII. **Magnetic Relaxation in a Y<sub>0.5</sub>Lu<sub>0.5</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> Superconductor at Various Magnetization Levels**  
Celebi S., ÖZTÜRK A., Uysal E., Kutuk S., Duzgun I.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.28, no.1, pp.33-39, 2015 (SCI-Expanded)
- VIII. **Effects of Lu Doping on the Magnetic Behavior of YBCO Superconductors Prepared by MPMG Method**  
Uysal E., ÖZTÜRK A., Kutuk S., Celebi S.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.27, no.9, pp.1997-2003, 2014 (SCI-Expanded)
- IX. **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)
- X. **Magnetization Anisotropy in YBCO Superconductors Prepared MPMG Method**  
Celebi S., Kutuk S., BOLAT S., ÖZTÜRK A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.25, no.2, pp.267-271, 2012 (SCI-Expanded)
- XI. **Irreversibility Line and Flux Relaxation in Bi:2223/Ag Tape Prepared by CTFF Technique: H//c axis**  
Duzgun I., ÖZTÜRK A., Celebi S.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.23, no.7, pp.1349-1354, 2010 (SCI-Expanded)
- XII. **The effect of partial Lu doping on magnetic behaviour of YBCO (123) superconductors**  
ÖZTÜRK A., Duzgun I., Celebi S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.495, no.1, pp.104-107, 2010 (SCI-Expanded)
- XIII. **AC loss study by AC susceptibility measurement in a commercial Bi:2223/Ag tape prepared by the CTFF method: H parallel to c axis and short specimen**  
Celebi S., Duzgun I., ÖZTÜRK A.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.23, no.2, 2010 (SCI-Expanded)
- XIV. **Observations of a hysteresis loss valley in yttrium barium copper oxide superconductors**  
Celebi S., Ozturk A., Kolemen U., LeBlanc M. A. R.  
JOURNAL OF APPLIED PHYSICS, vol.100, no.7, 2006 (SCI-Expanded)
- XV. **Effect of dc bias field superimposed with ac field amplitudes on the hysteresis loss in a sintered YBCO superconductor**  
Ozturk A., Celebi S.

- JOURNAL OF ALLOYS AND COMPOUNDS, vol.421, pp.4-7, 2006 (SCI-Expanded)
- XVI. **AC losses and determination of some superconducting parameters of Ag<sub>2</sub>O added Bi2223 superconductors**  
Duzgun I., Karaca I., Ozturk A., Celebi S.  
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.436, no.2, pp.93-98, 2006 (SCI-Expanded)
- XVII. **Observations and model of a new ac-loss valley in a YBCO superconductor**  
Ozturk A., Celebi S., LeBlanc M.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.18, no.8, pp.1029-1034, 2005 (SCI-Expanded)
- XVIII. **Mechanical properties of YBCO and YBCO+ZnO polycrystalline superconductors using Vickers hardness test at cryogenic temperatures**  
Kolemen U., Celebi S., Yoshino Y., Ozturk A.  
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.406, pp.20-26, 2004 (SCI-Expanded)
- XIX. **Superconducting and Vickers hardness properties of ZnO-added YBCO polycrystalline superconductors**  
KOLEMEN U., CELEBI S., KARAL H., OZTURK A., Cevik U., NEZIR S., GORUR O.  
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.241, no.2, pp.274-283, 2004 (SCI-Expanded)
- XX. **Effect of ZnO additions on the magnetic behaviour in YBCO superconductors**  
Celebi S., Kolemen U., Malik A., Ozturk A.  
PHYSICA STATUS SOLIDI A-APPLIED RESEARCH, vol.194, no.1, pp.260-270, 2002 (SCI-Expanded)
- XXI. **Determination of the material parameters of a melt-textured YBCO superconductor by DC magnetization analysis**  
Celebi S., Ozturk A., Yanmaz E., Kopya A.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.298, pp.285-290, 2000 (SCI-Expanded)
- XXII. **Magnetic responses of a high-T<sub>c</sub> semi-reversible YBCO superconductor**  
CELEBI S., OZTURK A., Cevik U.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.288, pp.249-254, 1999 (SCI-Expanded)
- XXIII. **Fabrication and characterization of Bi<sub>1.84</sub>Pb<sub>0.34</sub>Sr<sub>1.91</sub>Ca<sub>2.03</sub>Cu<sub>3.06</sub>O<sub>10</sub> superconductors prepared by a wet technique**  
Celebi S., Karaca I., Ozturk A., Nezir S.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.268, pp.256-260, 1998 (SCI-Expanded)
- XXIV. **Flux trapping properties of Bi(Pb)-Sr-Ca-Cu-O superconducting hollow cylinder: the effect of azimuthal flux on flux trapping in the cavity**  
Celebi S., Gencer A., Ozturk A.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.257, pp.14-18, 1997 (SCI-Expanded)

### Articles Published in Other Journals

- I. **The effect of potassium doping on resistive transitions and transport critical current of bulk YBCO high-T<sub>c</sub> superconductors**  
ÇELEBİ S., ÖZTÜRK A., Karaca İ., Kölemen U.  
TURKISH JOURNAL OF PHYSICS, vol.24, pp.567-576, 2000 (Scopus)

### Refereed Congress / Symposium Publications in Proceedings

- I. **Measurements of the relaxation at remanent magnetization of Bi: 2223/Ag Tape superconductor produced by Power in Tube (PIT) method**  
DÜZGÜN İ., ÖZTÜRK A., ÇELEBİ S.  
3rd International Conference on Science, Ecology and Technology (ICONSETE-2017), ROMA, Italy, 14 - 16 August 2017

- II. **Granularity Effect on Magnetic Behaviour in BSCCO Superconductor", , page 53, , 2017, Ottawa, Canada**  
ÇELEBİ S., KARACA İ., ÖZTÜRK A.  
29th Canadian Material Science Conference, Ottawa, Canada, 20 - 23 June 2017, pp.53
- III. **Granularity Effect on Magnetic Behaviour in a Bi<sub>1.84</sub>Pb<sub>0.34</sub>Sr<sub>1.91</sub>Ca<sub>2.03</sub>Cu<sub>3.06</sub>O<sub>10</sub> Superconductor**  
ÇELEBİ S., KARACA İ., ÖZTÜRK A.  
29th Canadian Materials Science Conference, Ottawa, Canada, 20 - 23 June 2017
- IV. **Observation of AC\_Loss Valley in a Commercial Bi:2223/Ag Tape**  
Duzgun I., ÖZTÜRK A., ÇELEBİ S.  
III International Conference on Engineering and Natural Science, Budapest, Hungary, 3 - 07 May 2017, pp.346
- V. **Arc erosion behavior of Cu-nanographite electrical contact materials**  
VAROL T., ÇANAKÇI A., ÖZTÜRK A.  
16th International Materials Symposium IMSP'2016, Denizli, Turkey, 12 - 14 October 2016, pp.271-277
- VI. **Effect of Dy Substitution at Ca Sites in BSCCO Ceramic Superconductors**  
DÜZGÜN İ., ÖZTÜRK A., ÇELEBİ S.  
VII International conference for Young Scientist, Kharkiv, Ukraine, 6 - 10 June 2016
- VII. **AC hysteresis losses in Y<sub>0.5</sub>Lu<sub>0.5</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub> superconductor**  
ÖZTÜRK A., ÇELEBİ S.  
5th National Superconductivity Symposium, İzmir Institute of Technology 2011, İzmir, Turkey, İzmir, Turkey, 3 - 06 July 2011

## Supported Projects

ALVER Ü., DUMAN M. S., ÇUVALCI H., ÇANAKÇI A., ASLAN M., AKPINAR M. V., OKUMUŞ H. İ., YILDIRIM İ., DENİZ İ., BELDÜZ A. O., et al., Project Supported by Higher Education Institutions, ZIRHLİ YELEKLER İÇİN FONKSİYONEL DERECELENDİRİLMİŞ HİBRİT NANOKOMPOZİT MALZEMELERİN ÜRETİMİ VE ÖZELLİKLERİNİN İNCELENMESİ, 2015 - 2016

## Metrics

Publication: 32

Citation (WoS): 178

Citation (Scopus): 182

H-Index (WoS): 9

H-Index (Scopus): 9