

Prof. SÜLEYMAN BOLAT

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAK-3236-2020

ScopusID: 6507502796

Yoksis Researcher ID: 21516

Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik Anabilimdalı, Turkey 1996 - 2003

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik Anabilimdalı, Turkey 1992 - 1996

Undergraduate, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1988 - 1992

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, $YBa_2Cu_3-xRE_xO_y$ ($x=0, 0,3, 0,5, 0,7, 1,0$ ve $RE=Yb, Sm, Nd$) Süperiletkenlerinin Yapısal ve Fiziksel

Özelliklerinin İncelenmesi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik Anabilimdalı, 2003

Postgraduate, Gümüş Katkısının $Bi(Pb)-Sr-Ca-Cu-O$ Süperiletkenine Etkisi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik Anabilimdalı, 1996

Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, 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, 2013 - 2021

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2010 - 2013

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Fizik, 2004 - 2010

Lecturer PhD, Karadeniz Technical University, Fen Fakültesi, Fizik, 2003 - 2004

Lecturer, Karadeniz Technical University, Fen Fakültesi, Fizik, 1996 - 2003

Research Assistant, Karadeniz Technical University, Fen Bilimleri Enstitüsü, -, 1993 - 1996

Academic and Administrative Experience

Deputy Head of Department, Karadeniz Technical University, Fen Fakültesi, Fizik, 2021 - Continues

Courses

FİZİK I, Undergraduate, 2013 - 2014, 2007 - 2008

PHYSICS I (B), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

PHYSICS II (B), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

PHYSICS II (A), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010

FİZİK II (B), Undergraduate, 2013 - 2014, 2011 - 2012

PHYSICS II, Undergraduate, 2013 - 2014

FİZİK II, Undergraduate, 2013 - 2014

FİZİK II, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

PHYSICS I, Undergraduate, 2013 - 2014

PHYSICS I (A), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011

Süperiletkenlerin Bazı Parametrelerin İncelenmesi, Postgraduate, 2012 - 2013

Sm3Ba5Cu8Oy Süperiletkenlerinin Manyetik Özellikleri, Doctorate, 2012 - 2013

Süperiletkenlerde Tersinirlik ve Tersinmezlik, Postgraduate, 2012 - 2013

Nd3Ba5Cu8Oy Süperiletkenlerinin Yapısal Özellikleri, Doctorate, 2012 - 2013

FİZİK I, Undergraduate, 2012 - 2013, 2010 - 2011

FİZİK II, Undergraduate, 2012 - 2013, 2010 - 2011

FİZİK II (A), Undergraduate, 2011 - 2012

Süperiletken Numune Hazırlama Tekniği, Doctorate, 2011 - 2012

Süperiletkenlerin Kaldırma Kuvveti, Doctorate, 2011 - 2012

PHYSICS II, Undergraduate, 2011 - 2012, 2010 - 2011

Yüksek Sıcaklık Süperiletkenlerinin Üretimi ve Karakterizasyonu, Postgraduate, 2011 - 2012, 2009 - 2010, 2008 - 2009

FİZİK II, Undergraduate, 2011 - 2012

FİZİK I, Undergraduate, 2011 - 2012

Sm3Ba5Cu8Oy Kompozisyonunun Yapısal Özellikleri, Doctorate, 2011 - 2012

Süperiletkenlerin Manyetik Alınanlığı, Postgraduate, 2011 - 2012, 2008 - 2009

PHYSICS I, Undergraduate, 2011 - 2012, 2010 - 2011

Katkılı YBCO(358) Süperiletkeninin Özellikleri, Doctorate, 2011 - 2012

YBCO(358) Süperiletkeninin Yapısal Özelliklerinin İncelenmesi, Doctorate, 2010 - 2011

FİZİK II (C), Undergraduate, 2010 - 2011

ELEKTRİK ve MANYETİZMA, Undergraduate, 2010 - 2011, 2009 - 2010, 2008 - 2009

YBCO(358) Süperiletkeninin Manyetik Özelliklerinin İncelenmesi, Doctorate, 2010 - 2011

FİZİK I (C), Undergraduate, 2010 - 2011

ELEKTRİK ve MANYETİZMA LAB. (A), Undergraduate, 2009 - 2010

FİZİK, Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008

Nadir Toprak Elementli Yüksek Sıcaklık Süperiletkenleri, Doctorate, 2009 - 2010

ELEKTRİK ve MANYETİZMA LAB., Undergraduate, 2009 - 2010

ELEKTRİK ve MANYETİZMA LAB. (B), Undergraduate, 2009 - 2010

ELEKTRİK ve MANYETİZMA LAB. (B), Undergraduate, 2008 - 2009

FİZİK II, Undergraduate, 2008 - 2009

ELEKTROMANYETİK TEORİ I, Undergraduate, 2008 - 2009

FİZİK I, Undergraduate, 2008 - 2009
GEOMETRİK OPTİK, Undergraduate, 2008 - 2009
GEOMETRİK OPTİK, Undergraduate, 2008 - 2009, 2007 - 2008
Süperiletkenlik Oluşum Kesri, Doctorate, 2008 - 2009
ELEKTRİK ve MANYETİZMA LAB. (A), Undergraduate, 2008 - 2009
FİZİK I, Undergraduate, 2008 - 2009
MEKANİK LAB. (A), Undergraduate, 2008 - 2009, 2007 - 2008
MEKANİK LAB. (B), Undergraduate, 2008 - 2009, 2007 - 2008
FİZİK IV (B), Undergraduate, 2007 - 2008
ÇEVRE FİZİĞİ, Undergraduate, 2007 - 2008
Süperiletkenlerde Tersinirlik ve Tersinmezlik, Doctorate, 2007 - 2008
FİZİK I (B), Undergraduate, 2007 - 2008
FİZİK IV (A), Undergraduate, 2007 - 2008
BİOFİZİK, Undergraduate, 2007 - 2008

Advising Theses

BOLAT S., Yeni (RE)3Ba5Cu8Oy (RE:Y, Nd, Sm, Gd) Bulk Süperiletkenlerinin Üretimi ve Karakterizasyonu, Doctorate, S.KÜTÜK(Student), 2014
BOLAT S., Farklı Eritme Yöntemleriyle Üretilen YBa2Cu3O7-x Süperiletkenlerin Yapısal ve Manyetik Özelliklerinin İncelenmesi, Postgraduate, S.KÜTÜK(Student), 2008

Jury Memberships

Doctorate, Doctorate, Atatürk Üniversitesi, June, 2016
Competition, TÜBİTAK Ortaöğretim Proje Yarışması Değerlendirme Jürisi, TÜBİTAK, April, 2016
Competition, TÜBİTAK Ortaöğretim Proje Yarışması Değerlendirme Jürisi, TÜBİTAK, April, 2014
Doctorate, Doctorate, Karadeniz Teknik Üniversitesi, June, 2006

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Amorphous Silicon Nanoparticles and Silicon Nanoglasses from Ab Initio Simulations**
BOLAT S., Durandurdu M.
Silicon, vol.16, no.10, pp.4263-4271, 2024 (SCI-Expanded)
- II. **Analysis of structural, electrical, and levitation properties of (RE: Nd, Sm, Gd) BCO-358 superconducting ceramics prepared by a modified MPMG technique**
KÜTÜK S., BOLAT S.
JOURNAL OF MATERIALS SCIENCE, vol.57, no.2, pp.1198-1214, 2022 (SCI-Expanded)
- III. **Amorphous boron phosphide: An ab initio investigation**
BOLAT S., Durandurdu M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.570, 2021 (SCI-Expanded)
- IV. **Amorphous zircon at high pressure**
BOLAT S., DURANDURDU M.
Journal of Physics and Chemistry of Solids, vol.153, 2021 (SCI-Expanded)
- V. **Very low density amorphous phase of zircon**
BOLAT S., DURANDURDU M.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.513, pp.137-143, 2019 (SCI-Expanded)
- VI. **An investigation of magnetoresistivity properties of an Y3Ba5Cu8Oy bulk superconductor**

Kutuk S., Bolat S., Terzioglu C., Altintas S. P.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.650, pp.159-164, 2015 (SCI-Expanded)

VII. **Effect of Magnetic Flux Distribution and Magnetic Powder Addition on the Magnetic Levitation Force of Sm123 Superconductors**

Abdioglu M., ÖZTÜRK K., Kutuk S., BOLAT S., Yanmaz E.

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.25, no.4, pp.923-929, 2012 (SCI-Expanded)

VIII. **Fabrication of the New Y3Ba5Cu8O (y) Superconductor Using Melt-Powder-Melt-Growth Method and Comparison with YBa2Cu3O7-x**

BOLAT S., Kutuk S.

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.25, no.4, pp.731-738, 2012 (SCI-Expanded)

IX. **Comparative study of critical current density, pinning force and levitation force behavior in Yb211 doped-Sm123 bulk superconductors**

ÖZTÜRK K., AKBULUT S., Kutuk S., BOLAT S., Celik S., Basoglu M.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.516, pp.167-171, 2012 (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. **Microstructure Study at Different Thicknesses of Disc-Shaped YBa2Cu3O7-x Prepared by FQMG Method**

Kutuk S., BOLAT S., ÖZTÜRK K., Akbulut S., Yanmaz E.

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.471-474, 2011 (SCI-Expanded)

XII. **Levitation Force Density on Different Thicknesses of YBa2Cu3O7-x Bulk Superconductor Fabricated by FQMG Process**

Kutuk S., BOLAT S., ÖZTÜRK K., Akbulut S., ÇAKIR O.

JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.475-479, 2011 (SCI-Expanded)

XIII. **Comparison of levitation force relative to thickness of disk shaped YBa2Cu3O7-x prepared by MPMG and FQMG processes**

Kutuk S., BOLAT S., Basoglu M., ÖZTÜRK K.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.488, no.1, pp.425-429, 2009 (SCI-Expanded)

XIV. **Structural,, electrical and optical properties of Cd1-xZnxO thin films and alloying effects on K beta/K alpha intensity ratios**

BACAŞIZ E., BOLAT S., Cevik U., DOĞAN O., ABAY B.

X-RAY SPECTROMETRY, vol.35, no.3, pp.165-168, 2006 (SCI-Expanded)

XV. **The effect of Ag-doping on the magnetic behaviour of Bi-(Pb)-Sr-Ca-Cu-O ceramic superconductors**

Bolat S., Celebi S., Gencer A., Comert H., Yanmaz E.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.269, pp.1-6, 1998 (SCI-Expanded)

Articles Published in Other Journals

I. **Properties of Bi1.4Pb0.4Sr2Ca3Cu4Oy (2234) Oxides Prepared by S.S.R. Method**

BOLAT S.

TURKISH JOURNAL OF PHYSICS, vol.24, pp.129-135, 2000 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

I. **Levitation Force of (RE)BCO-358 Bulk Superconductors**

Kutuk S., BOLAT S.

34th International Physics Congress of the Turkish-Physical-Society (TPS), Konacik, Turkey, 5 - 09 September 2018, vol.2042

- II. **Effect of Nd-Fe-B Magnetic Powder Addition on the Magnetic Levitation Force of Sm123 Superconductors**
BOLAT S., Kütük S., Abdioğlu M., Erdem Ö., Çelik Ş.
5th National Superconductivity Symposium, İzmir, Turkey, 3 - 06 July 2011, pp.16
- III. **Superconducting Studies in the New Y3Ba5Cu8Ox Bulk System**
BOLAT S., Kütük S., Abdioğlu M., Öztürk K., Başoğlu M.
5th National Superconductivity Symposium, İzmir, Turkey, 3 - 06 July 2011, pp.28
- IV. **Superconducting Studies in the New Y3Ba5Cu8Ox Bulk System**
Kütük S., BOLAT S., Abdioğlu M., Öztürk K., Başoğlu M.
5th National Superconductivity Symposium, İzmir, Turkey, 3 - 06 July 2011, pp.28
- V. **Levitation Force Properties in Different Cooling Conditions of (Sm123)1-x(Yb211)x Bulk Superconductor Fabricated by MPMG Process**
BOLAT S.
2nd International Conference on Superconductivity and Magnetism, Antalya, Turkey, 25 - 30 May 2010, pp.262
- VI. **Effect of Yb211 Doping on the Critical Current JC and Susceptibility of (Sm123)1-x(Yb211)x Bulk Superconductor**
BOLAT S.
2nd International Conference on Superconductivity and Magnetism, Antalya, Turkey, 25 - 30 May 2010, pp.256
- VII. **Levitation Force Density in Different Thicknesses of YBa2Cu3O7-x Bulk Superconductor Fabricated by FQMG Process**
KÜTÜK S., BOLAT S., ÖZTÜRK K., AKBULUT Ş., ÇAKIR O.
Superconductivity and Novel Magnetism, Antalya, Turkey, 1 - 03 April 2010, vol.2, pp.25-30
- VIII. **Flux Behavior in YBa2Cu3O7-x Produced Melt-Powder-Melt-Growth (MPMG) and Flame-Quench-Melt-Growth (FQMG) Processes**
BOLAT S.
International Conference on Superconductivity and Magnetism, Antalya, Turkey, 25 - 29 August 2009, pp.311
- IX. **Calculation of Critical Current Density from Magnetic Levitation Force for YBa2Cu3-xRExOy (RE=Yb, Sm, Nd) Superconductors**
BOLAT S.
International Conference on Superconductivity and Magnetism, Antalya, Turkey, 25 - 29 August 2009, pp.314
- X. **The Range of Optimum Temperature for Levitation Force per Unit Volume in YBa2Cu3O7-x Fabricated by MPMG Process**
BOLAT S.
Fourth National Superconductors Symposium, Trabzon, Turkey, 10 - 13 August 2009, pp.56
- XI. **The Magnetic Levitation Force Properties of (Sm-123)1-xYb(211)x Bulk Superconductor**
BOLAT S., ÖZTÜRK K.
Fourth National Superconductors Symposium, Trabzon, Turkey, 10 - 13 August 2009, pp.25
- XII. **BiPbSrCaCuO Süperiletken Numunesinin Farklı ? ve X-Işınlarında Kütle Soğurma Katsayılarının Ölçülmesi**
BOLAT S.
III. Ulusal Yüksek Sıcaklık Süperiletkenler Sempozyumu, Bolu, Turkey, 20 June - 22 May 2005, pp.108
- XIII. **Gümüş Katkısının Bi(Pb)-Sr-Ca-Cu-0 Süperiletkenlerine Etkisi**
BOLAT S.
TFD 16. Ulusal Fizik Kongresi, Balıkesir, Turkey, 26 - 29 August 1996, pp.77
- XIV. **Bi1.4Pb0.4Sr2Ca3Cu4Oy Süperiletkenlerine Gümüşün Etkisinin İncelenmesi**
BOLAT S.
TFD 15. Ulusal Fizik Kongresi, Antalya, Turkey, 26 - 29 September 1995, pp.119
- XV. **Petek Tipi Bi(Pb)-Sr-Ca-Cu-0 Bileşiğinin Bazı Fiziksel Özelliklerinin İncelenmesi**
BOLAT S.
TFD 15. Ulusal Fizik Kongresi, Antalya, Turkey, 26 - 29 September 1995, pp.116

Supported Projects

BOLAT S., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Ulusal Süperiletkenlik Araştırma Merkez Laboratuvarı (USAML), 2010 - Continues

BAYRAM T., YILMAZ A. H., APAYDIN G., BOLAT S., Project Supported by Higher Education Institutions, Yenilikçi Yaklaşımla Nükleer ve Modern Fizik Lisans Laboratuvarlarının Geliştirilmesi, 2021 - 2024

Bolat S., Project Supported by Higher Education Institutions, Katkılanmış YBCO Süperiletkeninin Bazı Manyetik Özelliklerinin İncelenmesi, 2010 - 2011

Bolat S., Project Supported by Higher Education Institutions, YBCO (211) Süperiletken Pota İçerisinde Süperiletkenlerin Kristal Büyütme Yöntemi İle Üretimi Ve Karakterizasyonu, 2005 - 2007

Bolat S., Yanmaz E., Project Supported by Higher Education Institutions, Top Seeding Metoduyla İri Taneli YBCO Tek Kristalinin Üretimi ve Karakterizasyonu,, 2000 - 2002

Bolat S., Yanmaz E., Project Supported by Higher Education Institutions, Bi-Sr-Ca-Cu-O Amorf Numunelerin Elektrik Alanı Yardımıyla Kristalize Edilmesi Ve Süperiletkenlik Özelliklerinin İncelenmesi, 1996 - 1998

Scientific Refereeing

Project Supported by Higher Education Institutions, BAP Research Project, Karadeniz Technical University, Turkey, August 2021

Journal of Superconductivity and Novel Magnetism, SCI Journal, June 2014

Materials Science and Engineering B, SCI Journal, October 2011

Scientific Consultations

MEB Dursun Ali Kurt AİHL (Proje Okulu), Scientific Consultancy, Karadeniz Technical University, Fen Fakültesi, Fizik, Turkey, 2017 - Continues

Metrics

Publication: 31

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Citation (Scopus): 97

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