

## Assoc. Prof. OLCAY KIZILASLAN

### Personal Information

**Email:** olcay.kizilaslan@inonu.edu.tr

**Web:** <https://avesis.inonu.edu.tr/olcay.kizilaslan>

### International Researcher IDs

ScholarID: b728BMkAAAAJ

ORCID: 0000-0003-2528-433X

Publons / Web Of Science ResearcherID: HLH-6089-2023

ScopusID: 55195941300

Yoksis Researcher ID: 120759

### Education Information

Post Doctorate, Eberhard Kals Universitaet Tübingen, Institute of Physics , Germany 2021 - 2022

Post Doctorate, Eberhard Kals Universitaet Tübingen, Applied Physics, Ctr Quantum Sci Lisa,, Germany 2018 - 2018

Post Doctorate, Eberhard Kals Universitaet Tübingen, Applied Physics , Ctr Quantum Sci Lisa, Germany 2016 - 2017

Doctorate, Inonu University, Fen Bilimleri, Turkey 2010 - 2015

Doctorate, Friedrich-Alexander-Universitaet Erlangen-Nürnberg, Physical Enstitute, Physics, Germany 2013 - 2013

Postgraduate, Inonu University, Fen Bilimleri, Turkey 2008 - 2010

Undergraduate, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, Turkey 2004 - 2008

### Dissertations

Doctorate, BİYOMEDİKAL UYGULAMALARA YÖNELİK Bİ-BAZLI DOĞAL JOSEPHSON EKLEMLERİN ÜRETİMİ VE KARAKTERİZASYONU, Inonu University, Fen Bilimleri Enstitüsü, Fizik, 2015

Postgraduate, Tek Kristal HTc BSCCO Süperiletken Whisker? ların Mekaniksel Özellikleri, Inonu University, Fen Bilimleri Enstitüsü, Fizi, 2010

### Research Areas

Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Magnetic Properties and Materials, Superconductivity, Natural Sciences

### Academic Titles / Tasks

Associate Professor, Inonu University, Mühendislik Fakültesi, Biyomedikal Müh., 2020 - Continues

Assistant Professor, Inonu University, Mühendislik Fakültesi, Biyomedikal, 2015 - 2020

Researcher, Eberhard Kals Universitaet Tübingen, Eberhard Kals Universitaet Tübingen/Ctr Quantum Sci LISA, Physics, 2018 - 2018

Assistant Professor, Inonu University, Mühendislik Fakültesi, Biyomedikal, 2015 - 2018

Other, Eberhard Kals Universitaet Tübingen, Eberhard Kals Universitaet Tübingen/Ctr Quantum Sci LISA, Physics, 2016 - 2017

Research Assistant, Inonu University, Fen Fakültesi, Fizik, 2011 - 2015

Other, Universitaet Erlangen Nürnberg, Applied Physics institute, 2013 - 2013

## Academic and Administrative Experience

Deputy Head of Department, Inonu University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, 2021 - Continues

Head of Department, Inonu University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, 2020 - Continues

Manager of Research and Application Center, Inonu University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, 2020 - 2021

## Courses

202-Elektro Manyetik Teori, Undergraduate, 2018-2019

209-Linear Cebir, Undergraduate, 2017 - 2018

101-Genel Fizik, Undergraduate, 2018-2019

209-Linear Cebir, Undergraduate, 2018-2019

102- Genel Fizik, Undergraduate, 2018-2019

103- Genel Fizik, Undergraduate, 2017 - 2018

104-Genel Fizik, Undergraduate, 2017 - 2018

202-Elektro Manyetik Teori, Undergraduate, 2017 - 2018

101- Genel Fizik, Undergraduate, 2017-2018

202-Elektro Manyetik Teori, Undergraduate, 2017-2018

209-Linear Cebir, Undergraduate, 2017-2018

102-Genel Fizik, Undergraduate, 2017-2018

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

- I. **Thermal hysteresis dependent magnetocaloric effect properties of Ni<sub>50-x</sub>Cu<sub>x</sub>Mn<sub>38</sub>Sn<sub>12</sub>B<sub>3</sub> shape memory ribbons**  
KIZILASLAN O.  
INTERMETALLICS, vol.109, pp.135-138, 2019 (SCI-Expanded)
- II. **Magnetoresistance properties of magnetic Ni-Mn-Sn-B shape memory ribbons and magnetic field sensor aspects operating at room temperature**  
Kirat G., KIZILASLAN O., AKSAN M. A.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.477, pp.366-371, 2019 (SCI-Expanded)
- III. **Resonant Cavity Modes in Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+x</sub> Intrinsic Josephson Junction Stacks**  
Zhang H., Wieland R., Chen W., Kizilaslan O., Ishida S., Han C., Tian W., Xu Z., Qi Z., Qing T., et al.  
PHYSICAL REVIEW APPLIED, vol.11, no.4, 2019 (SCI-Expanded)
- IV. **Self-Mixing Spectra of Terahertz Emitters Based on Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+delta</sub> Intrinsic Josephson-Junction Stacks**  
Huang Y., Sun H., An D., Zhou X., Ji M., Rudau F., Wieland R., Hampp J. S., Kizilaslan O., Yuan J., et al.  
PHYSICAL REVIEW APPLIED, vol.8, no.5, 2017 (SCI-Expanded)
- V. **Terahertz Spectroscopy of Dilute Gases Using Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8+delta</sub> Intrinsic Josephson-Junction Stacks**  
SUN H., YANG Z., KINEV N. V., KISELEV O. S., LV Y., HUANG Y., HAO L., ZHOU X., JI M., TU X., et al.  
PHYSICAL REVIEW APPLIED, vol.8, no.5, 2017 (SCI-Expanded)
- VI. **Thermal and structural characterization of the Bi<sub>2-x</sub>Sm<sub>x</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>10+</sub> glass-ceramic system**  
KIZILASLAN O., KIRAT G., AKSAN M. A.

INTERNATIONAL JOURNAL OF APPLIED GLASS SCIENCE, vol.8, no.3, pp.344-351, 2017 (SCI-Expanded)

- VII. **Tuning THz emission properties of Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub>+ $\delta$  intrinsic Josephson junction stacks by charge carrier injection**  
Kizilaslan O., RUDAU F., WIELAND R., HAMPP J. S., ZHOU X. J., JI M., KISELEV O., KINEV N., HUANG Y., HAO L. Y., et al.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.30, no.3, 2017 (SCI-Expanded)
- VIII. **Preparation and characterization of CaO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> (CAS) glass-ceramics**  
ÖZABACI M., AKSAN M. A., KIRAT G., KIZILASLAN O., YAKINCI M. C.  
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.454, pp.8-12, 2016 (SCI-Expanded)
- IX. **Effect of the Er-substitution on critical current density in glass-ceramic Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>(Cu<sub>3-x</sub>Er<sub>x</sub>)O<sub>10</sub>+ $\delta$  superconducting system**  
KIRAT G., KIZILASLAN O., AKSAN M. A.  
CERAMICS INTERNATIONAL, vol.42, no.13, pp.15072-15076, 2016 (SCI-Expanded)
- X. **Interlayer tunneling spectroscopy of mixed-phase BSCCO superconducting whiskers**  
KIZILASLAN O., TRUCCATO M., SIMSEK Y., AKSAN M. A., KOVAL Y., MUELLER P.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.29, no.6, 2016 (SCI-Expanded)
- XI. **Enhancement of magnetic relaxation behavior by texturing in Bi-2212 superconducting rods**  
ÖZABACI M., KIZILASLAN O., KIRAT G., AKSAN M. A., MADRE M. A., SOTELO A., YAKINCI M. C.  
CERAMICS INTERNATIONAL, vol.42, no.7, pp.8325-8330, 2016 (SCI-Expanded)
- XII. **Enhancement of the critical current of intrinsic Josephson junctions by carrier injection**  
KIZILASLAN O., SIMSEK Y., AKSAN M. A., KOVAL Y., MUELLER P.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.28, no.8, 2015 (SCI-Expanded)
- XIII. **Magnetic relaxation behavior in the Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3-x</sub>MoxO<sub>10</sub>+ $\delta$  system fabricated by glass-ceramic technique**  
KIZILASLAN O., KIRAT G., AKSAN M. A.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.384, pp.186-191, 2015 (SCI-Expanded)
- XIV. **Grain alignment and its relationship with superconductivity and thermal transport of Ni-substituted Bi-2212 textured rods fabricated at two different growth rates**  
ÖZABACI M., KIZILASLAN O., MADRE M. A., YAKINCI M. C., SOTELO A.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.26, no.5, pp.3090-3099, 2015 (SCI-Expanded)
- XV. **Adjustable tunneling barrier in bi-based high-T<sub>c</sub> cross-whisker junctions**  
KIZILASLAN O., SIMSEK Y., AKSAN M. A., KOVAL Y., YAKINCI M. C., MUELLER P.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.28, no.2, 2015 (SCI-Expanded)
- XVI. **Growth Speed and Substitution Effects on Alignment and Thermal Transport Properties of Bi-2212 Textured Superconductors**  
ÖZABACI M., RASEKH S., KIZILASLAN O., MADRE M. A., SOTELO A., YAKINCI M. C.  
JOM, vol.67, no.1, pp.222-232, 2015 (SCI-Expanded)
- XVII. **Effect of Co addition on the critical current density of MgB<sub>2</sub> superconductor**  
KIRAT G., KIZILASLAN O., AKSAN M. A., YAKINCI M. C.  
PHYSICA B-CONDENSED MATTER, vol.445, pp.24-27, 2014 (SCI-Expanded)
- XVIII. **Crystallization of glass-ceramic Bi<sub>3</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>y</sub> superconducting system**  
KIZILASLAN O., AKSAN M. A.  
JOURNAL OF CRYSTAL GROWTH, vol.381, pp.77-82, 2013 (SCI-Expanded)
- XIX. **Nanoindentation Properties of HT<sub>c</sub> Superconducting Single-Crystalline Whiskers**  
KIZILASLAN O., Yilmaz F., AKSAN M. A., YAKINCI M. C.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.4, pp.907-911, 2013 (SCI-Expanded)
- XX. **Thermoelectric power and thermal conductivity study of the Y<sub>3</sub>Ba<sub>5</sub>Cu<sub>8</sub>O<sub>x</sub> system**  
AKSAN M. A., KIZILASLAN O., AKSAN E. N., YAKINCI M. C.  
PHYSICA B-CONDENSED MATTER, vol.407, no.14, pp.2820-2824, 2012 (SCI-Expanded)

## Articles Published in Other Journals

I. **MAGNETOCALORIC EFFECT AROUND CURIE TEMPERATURE IN Ni<sub>50-x</sub> C<sub>x</sub>Mn<sub>38</sub>Sn<sub>12</sub>B<sub>3</sub> SHAPE MEMORY RIBBONS**

KIZILASLAN O.

Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.61, no.2, 2019 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

I. **Magnetocaloric Effect in Ni<sub>50-x</sub>CoxMn<sub>38</sub>Sn<sub>12</sub>B<sub>3</sub> Shape Memory Ribbons**

KIZILASLAN O.

2ND INTERNATIONAL CONFERENCE ON PHYSICAL CHEMISTRY FUNCTIONAL MATERIALS, 25 - 27 June 2019

II. **Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>1-2x</sub>Cu<sub>2</sub>O<sub>8+x</sub> Terahertz (THz) Yayıncıların Elektronik ve Elektromanyetik Özelliklerinin İlişkisi**

KIZILASLAN O.

6. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALARI KONGRESİ, 26 - 27 April 2019

III. **Charge carrier concentration dependence of THz emission properties of Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>1</sub>Cu<sub>2</sub>O<sub>x</sub> emitters**

KIZILASLAN O.

6th International Conference on Superconductivity and Magnetism- ICSM2018, 29 April - 04 May 2018

IV. **Magnetic-Field-Induced Shape Recovery in Ni-Cu-Mn-Sn-B Ribbons**

KIRAT G., KIZILASLAN O., AYDOĞDU Y., AKSAN M. A.

6th International Conference on Superconductivity and Magnetism (ICSM2018), Antalya, Turkey, 29 April - 04 May 2018

V. **Magnetoresistance behavior of the Fe-doped ferromagnetic shape memory (FSM) ribbons**

KIRAT G., KIZILASLAN O., AKSAN M. A.

International Conference on Superconductivity and Magnetism-ICSM2018, Antalya, Turkey, 08 April 2021

VI. **Magnetic field induced shape recovery in Ni-Mn-Sn-B ribbons**

KIRAT G., KIZILASLAN O., AYDOĞDU Y., AKSAN M. A.

International Conference on Superconductivity and Magnetism-ICSM2018, Antalya, Turkey, 08 April 2021

VII. **Doping Dependence of THz emission properties of Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8δ</sub> Terahertz emitters in a modest range of charge carrier concentration.**

KIZILASLAN O., Fa R., Wieland R., Hampp J. S., Zhou X., Ji M., Kiselev O., Kinev N., Huang Y., Hao L., et al.

INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND MATERIALS SCIENCE (ICMMS 2017), Adana, Turkey, 11 - 15 October 2017

VIII. **Magnetic Properties of Fe-Doped Ni-Mn-Sn-B Ferromagnetic Shape Memory Ribbons**

KIRAT G., AKSAN M. A., KIZILASLAN O.

INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND MATERIALS SCIENCE (ICMMS-2017), 11 October 2017 - 15 January 2018, pp.55

IX. **Emission of terahertz radiation from intrinsic Josephson junctions in Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub> stacks**

Hampp J. S., KIZILASLAN O., Wieland R., Rudau F., Zhou X., Ji M., Huang Y., Hao L., Kinev N. V., Kiselev O. S., et al.

Verhandlungen der Deutschen Physikalischen Gesellschaft - DPG, 19 - 24 March 2017

X. **Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub> intrinsic Josephson junction stacks Coherent THz emission and electrothermal properties**

rudau f., wieland r., KIZILASLAN O., hampp j., zhou x., ji m., kinev n., huang y., yuan j., an d., et al.

10th International Symposium on Intrinsic Josephson Effects and Plasma Oscillations in High-Tc Superconductors, 9 - 12 October 2016

XI. **ways to tune the maximum power of Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>8</sub> intrinsic Josephson junction stacks**

rudau f., wieland r., KIZILASLAN O., hampp j., zhou x., ji m., kinev n., huang y., yuan j., hao l., et al.

The 10th International Symposium on Intrinsic Josephson Effects and Plasma Oscillations in High-Tc Superconductors, 9 - 12 October 2016

- XII. **THz emission from Bi 2212 single crystal whiskers**  
KIZILASLAN O., Rudau F., Wieland r., Hampp j., zhou x., Ji M., kinev n., huang y., yuan j., An D., et al.  
The 10th International Symposium on Intrinsic Josephson Effects and Plasma Oscillations in High-Tc Superconductors (Plasma+ 2016), 9 - 12 October 2016
- XIII. **Single Crystal Bi2Sr2CaCu2O8 THz emitters and YBa2Cu3O7 junction detectors**  
Wieland R., Rudau F., KIZILASLAN O., Hampp J., Kinev N., Juan J., huang y., ji m., zhou x., ishii a., et al.  
international conference on nano confined superconductors and their application, 3 - 07 September 2016
- XIV. **effect of the Er substitution on critical current density in glass ceramic Bi2Sr2Ca2 Cu3-xEr<sub>x</sub>O10-d**  
kirat g., KIZILASLAN O., AKSAN E. N.  
international conference on superconductivity and magnetism 2016, 24 - 30 April 2016
- XV. **Temperature dependence of the interlayer transport mechanism of Bi 2212**  
KIZILASLAN O., ŞİMŞEK y., AKSAN M. A., KOVAL y., MULLER p.  
5th international conference on superconductivity and magnetism 2016, 24 - 30 April 2016
- XVI. **phase purity as a factor controlling the magnetic properties of CaO Al2O3 SiO2 CAS based glass ceramics**  
ozabaci m., kirat g., KIZILASLAN O., AKSAN M. A., YAKINCI M. E.  
5th international conference on superconductivity and magnetism 2016, 24 - 30 April 2016
- XVII. **Effect of the Er-Substitution on Critical Current Density in Glass-Ceramic Bi2Sr2Ca2(Cu3-xEr<sub>x</sub>)O10+delta Superconducting System**  
KIRAT G., KIZILASLAN O., AKSAN M. A.  
5th International Conference on Superconductivity and Magnetism, Muğla, Turkey, 24 - 30 April 2016, pp.533
- XVIII. **Phase purity as a factor controlling the magnetic properties of CaO-Al2O3-SiO2 (CAS) based glass-ceramics**  
ÖZABACI M., KIRAT G., KIZILASLAN O., AKSAN M. A., YAKINCI M. E.  
International Conference on Superconductivity and Magnetism-ICSM2016, FETHİYE, Turkey, 01 April 2016
- XIX. **Effect of the Er-substitution on critical current density in glassceramic Bi2Sr2Ca2(Cu3-xEr<sub>x</sub>)O10+? Superconducting System**  
KIRAT G., KIZILASLAN O., AKSAN M. A.  
International Conference on Superconductivity and Magnetism-ICSM2016, FETHİYE, Turkey, 01 April 2016
- XX. **low temperature thermal conductivity properties of textured BSCCO superconductors**  
ozabaci m., kirat g., KIZILASLAN O., AKSAN M. A., YAKINCI M. E.  
superconducting materials on their way from physics to applications, 17 - 20 February 2016
- XXI. **Interlayer Tunneling Spectroscopy of Mixed Phase BSCCO Superconducting Whisker**  
KIZILASLAN O., Yılmaz S., AKSAN M. A., Marco T., Yuri K., Paul M.  
The 8th Asian Conference on Applied Superconductivity and Cryogenics, 22 - 25 November 2015
- XXII. **enhancement of the critical current of intrinsic josephson junctions by carrier injection**  
KIZILASLAN O., Yılmaz S., AKSAN M. A., Koval Y., YAKINCI M. E., Müller P.  
9th international conference on magnetic and superconducting material, 30 April - 03 May 2015
- XXIII. **Role of the Fe and Ni substitution in magnetic behavior of the glass ceramic cordierite system**  
GÖKHAN K., MURAT Ö., KIZILASLAN O., AKSAN M. A., YAKINCI M. E.  
9th international conference on magnetic and superconducting material, 30 April - 03 May 2015
- XXIV. **Magnetic Relaxation Studies on Bi 2212 Textured superconductor**  
Murat Ö., KIZILASLAN O., Gökhan K., AKSAN M. A., Andre S., YAKINCI M. E.  
9th international conference on magnetic and superconducting material, 30 April - 03 May 2015
- XXV. **Large range variation of superconductivity in Bi2Sr2Ca1Cu2O8x intrinsic Josephson junctions**  
KIZILASLAN O., ŞİMŞEK Y., AKSAN M. A., koval y., YAKINCI M. E., müller p.  
4th international conference on superconductivity and magnetism, 27 April - 02 May 2014
- XXVI. **c-axis characterization of BSCCO cross-whisker junction**  
KIZILASLAN O., ŞİMŞEK Y., AKSAN M. A., koval y., YAKINCI M. E., müller p.  
7th asian conference on applied superconductivity and cryogenics, 23 - 25 October 2013

## Supported Projects

KIZILASLAN O., ZENGİN R., KIRAT G., ŞİMŞEK M., ÖZGÜVEN Ö., DOĞAN B., BİLGİLİ H., AKSAN M. A., ERDOĞAN A., Project Supported by Higher Education Institutions, RF PÜSKÜRTME TEKNİĞİ İLE HİDROKSİAPATİT VE FLORAPATİT KAPLANMIŞ ORTODONTİK ŞEKİL HAFIZALI NİTİ TELLERİN HAZIRLANMASI, 2018 - 2021

ERDOĞAN A., KIZILASLAN O., ABBASOV T., SARİMEŞELİ PAÇACI A., BİLGİLİ H., Project Supported by Higher Education Institutions, Doksorubisin Yüklü Manyetik Nanoparçacıkların Sentezlenmesi ve Karakterizasyonu, 2018 - 2021

KIZILASLAN O., KLEİNER R., Project Supported by Higher Education Institutions, Süperiletken THz cihazların ısıma gücünün artırılması ve frekans aralığının kontrol edilmesi, 2018 - 2019

ŞİMŞEK M., YAKINCI M. E., ERDOĞAN A., KIZILASLAN O., ÖZGÜVEN Ö., BİLGİLİ H., DOĞAN B., Project Supported by Higher Education Institutions, BİYOMEDİKAL MÜHENDİSLİĞİ BÖLÜMÜ ÖĞRENCİ LABORATUVARLARI ALTYAPI TAMAMLAMA PROJESİ, 2015 - 2018

## Metrics

Publication: 47  
Citation (WoS): 204  
Citation (Scopus): 204  
H-Index (WoS): 8  
H-Index (Scopus): 8

## Non Academic Experience

The Eberhard Karls Universität Tübingen  
The Eberhard Karls Universität Tübingen  
Erlangen Üniversitesi