

# **Prof. MEHMET ALİ AKSAN**

## **Personal Information**

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## **International Researcher IDs**

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## **Education Information**

Doctorate, Inonu University, Fen Bilimleri Enstitüsü, Fizik A.B.D., Turkey 1998 - 2003

Postgraduate, Inonu University, Fen Bilimleri Enstitüsü, Fizik A.B.D., Turkey 1995 - 1998

Undergraduate, Inonu University, Fen Edebiyat Fakültesi, Fizik Bölümü, Turkey 1991 - 1995

## **Foreign Languages**

English, B2 Upper Intermediate

## **Dissertations**

Doctorate, Bi-Bazlı HTc Süperiletkenlerde Fiziksel Özellikler İle Birlikte Termoelktrik Güç ve Termal İletkenlik Karakteristiklerinin İncelenmesi, Inonu University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2003

Postgraduate, BiSrCaCuO (2223) Cam-Seramik Süperiletken Sistemine Küçük Yarıçaplı İyonların Katılması ve Sistemin Fiziksel ve Elektriksel Özelliklerine Etkilerinin İncelenmesi, Inonu University, Fen Bilimleri Enstitüsü, Fizik (Dr), 1998

## **Research Areas**

Metallurgical and Materials Engineering, Material science and engineering, Ceramic Materials, Semiconductor and Superconductor Materials, Electrical and Magnetic Properties, Glass Technology and Glass Ceramics, Material Characterization, Metallic Materials, Nanomaterials, Thermal Properties, Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Thermal Properties of Condensed Matter, Surfaces, Interfaces, Thin Films and Nanosystems, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electronic structure of bulk material, Electronic structure of bulk material, Magnetic Properties and Materials, Superconductivity, Electronic transport in condensed matter, Natural Sciences, Engineering and Technology

## **Academic Titles / Tasks**

Professor, Inonu University, Fen-Edebiyat Fakültesi, Fizik, 2012 - Continues

Associate Professor, Inonu University, Fen-Edebiyat Fakültesi, Fizik, 2007 - 2012

Research Assistant, Inonu University, Fen-Edebiyat Fakültesi, Fizik, 1996 - 2006

## **Academic and Administrative Experience**

Inonu University, Fen Edebiyat Fakültesi, Fizik Bölümü, 2007 - Continues  
Inonu University, Fen Edebiyat Fakültesi, 2010 - 2016  
Inonu University, Bilimsel Ve Teknolojik Araştırma Merkezi, 2008 - 2016  
Inonu University, Fen Edebiyat Fakültesi, Fizik Bölümü, 2007 - 2007

## **Courses**

CAM SERAMİKLER, Doctorate, 2016 - 2017  
KATİHAL FİZİĞİ I, Postgraduate, 2016 - 2017  
KATİHAL FİZİĞİ I, Undergraduate Double Major, 2016-2017  
CAM SERAMİKLER, Undergraduate Minor, 2016-2017  
CAM SERAMİKLER, Undergraduate Minor, 2013-2014  
KLASİK MEKANİK, Undergraduate, 2013-2014  
KUANTUM MEKANIĞI, Undergraduate, 2013-2014  
TERMAL FİZİK, Undergraduate Minor, 2013-2014  
FİZİKTE TEKNOLOJİK UYGULAMALAR, Undergraduate Double Major, 2012-2013  
GENEL FİZİK, Undergraduate, 2012-2013  
SÜPERİLETKENLİK I, Undergraduate Double Major, 2011-2012  
İLERİ KLASİK MEKANİK, Undergraduate Minor, 2008-2009

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

- I. **Investigation of martensitic transformation and magnetoresistance properties of cu-substituted Ni-Mn-Sn-B melt spun ribbons**  
Kirat G., AKSAN M. A.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.529, 2021 (SCI-Expanded)
- II. **Magnetocaloric Properties of Ni-Rich Ni<sub>50-x</sub>CoxMn<sub>38</sub>Sn<sub>12</sub>B<sub>3</sub> Shape Memory Ribbons**  
Kirat G., Kızılaslan O., AKSAN M. A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.34, no.2, pp.581-588, 2021 (SCI-Expanded)
- III. **Influence of the Cu substitution on magnetic properties of Ni-Mn-Sn-B shape memory ribbons**  
Aksan M. A., Kirat G.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.127, pp.1-9, 2021 (SCI-Expanded)
- IV. **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)
- V. **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)
- VI. **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)
- VII. **The effect of Sn content on mechanical, magnetization and shape memory behavior in NiMnSn alloys**  
Aydogdu Y., Turabi A. S., Kok M., Aydogdu A., Yakinci Z. D., AKSAN M. A., YAKINCI M. C., Karaca H. E.  
JOURNAL OF ALLOYS AND COMPOUNDS, vol.683, pp.339-345, 2016 (SCI-Expanded)
- VIII. **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+delta</sub> superconducting system**

- KIRAT G., KIZILASLAN O., AKSAN M. A.  
CERAMICS INTERNATIONAL, vol.42, no.13, pp.15072-15076, 2016 (SCI-Expanded)
- IX. **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)
- X. **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)
- XI. **Phase stabilization of magnetite (Fe<sub>3</sub>O<sub>4</sub>) nanoparticles with B<sub>2</sub>O<sub>3</sub> addition: A significant enhancement on the phase transition temperature**  
Topal U., AKSAN M. A.  
JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.406, pp.123-128, 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>Mo<sub>x</sub>O<sub>10+delta</sub> 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. **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)
- XV. **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)
- XVI. **J(c) enhancement and flux pinning of Se substituted YBCO compound**  
YAKINCI Z. D., GOKHFELD D. M., ALTIN E., KURT F., ALTIN S., DEMİREL S., AKSAN M. A., YAKINCI M. C.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.24, no.12, pp.4790-4797, 2013 (SCI-Expanded)
- XVII. **Crystallization of glass-ceramic Bi(3)Sr(2)Ca(2)Cu(3)O<sub>y</sub> superconducting system**  
KIZILASLAN O., AKSAN M. A.  
JOURNAL OF CRYSTAL GROWTH, vol.381, pp.77-82, 2013 (SCI-Expanded)
- XVIII. **Fabrication of BSCCO Films on SrTiO<sub>3</sub> Substrates Using Ultrasonic Spray Pyrolysis (USP) Technique**  
TURKOGLU S., AKSAN M. A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.5, pp.1869-1872, 2013 (SCI-Expanded)
- XIX. **Low Temperature Magnetic Behavior of Ca<sub>3</sub>Co<sub>4</sub>O<sub>x</sub> Polycrystalline Material**  
DEMİREL S., ALTIN S., AKSAN M. A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.5, pp.1617-1620, 2013 (SCI-Expanded)
- XX. **Current-Voltage Measurements on a Bi<sub>2</sub>Sr<sub>2</sub>CaCu<sub>2</sub>O<sub>x</sub> Whisker and Investigation of Its Vortex Dynamics in Self Field**  
ALTIN S., AKSAN M. A., YAKINCI M. C., BERNSTEIN P.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.5, pp.2037-2040, 2013 (SCI-Expanded)
- XXI. **Nanoindentation Properties of HTc 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)
- XXII. **Improved superconducting properties of MgB<sub>2</sub> thin films fabricated by ultrasonic spray pyrolysis method at high temperature**  
YAKINCI M. C., YAKINCI Z. D., AKSAN M. A., BALCI Y.  
CRYOGENICS, vol.52, no.12, pp.749-754, 2012 (SCI-Expanded)
- XXIII. **Low temperature electrical and thermal transport properties of the Ca<sub>3-x</sub>SbxCo<sub>4</sub>O<sub>9</sub> system**  
DEMİREL S., AKSAN M. A., ALTIN S.

- JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.23, no.12, pp.2251-2256, 2012 (SCI-Expanded)
- XXIV. **Synthesis of BSCCO Films on MgO (100) Substrate by Ultrasonic Spray Pyrolysis Technique**  
TURKOGLU S., AKSAN M. A.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.25, no.6, pp.2087-2095, 2012 (SCI-Expanded)
- XXV. **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)
- XXVI. **Fabrication of single crystalline Bi-2212 whiskers from Ga added Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub> composition and their thermal, structural, electrical and magnetic properties**  
ALTIN S., AKSAN M. A., YAKINCI M. C.  
MATERIALS CHEMISTRY AND PHYSICS, vol.133, pp.706-712, 2012 (SCI-Expanded)
- XXVII. **Fabrication of NdCeCuO and effects of binding agents on the growth, micro-structural and electrical properties**  
ALTIN S., AKSAN M. A., TURKOGLU S., YAKINCI M. C.  
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.471, pp.1692-1698, 2011 (SCI-Expanded)
- XXVIII. **MgB<sub>2</sub> fabrication by diffusion-controlled three layered (B-Mg-B) technique**  
ALTIN S., AKSAN M. A., YAKINCI M. C.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.72, no.9, pp.1070-1076, 2011 (SCI-Expanded)
- XXIX. **Fabrication of single crystalline Bi-2212 whisker with addition of Sb<sub>2</sub>O<sub>3</sub> into the Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub> system and their thermal, structural and superconducting properties**  
ALTIN S., AKSAN M. A., YAKINCI M. C.  
SOLID STATE SCIENCES, vol.13, no.5, pp.879-886, 2011 (SCI-Expanded)
- XXX. **Power Law Dependence of I-V Characteristics of Bi-2212 Whiskers at Low Magnetic Fields**  
ALTIN S., ALTIN E., AKSAN M. A., BALCİ Y., YAKINCI M. C.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.223-227, 2011 (SCI-Expanded)
- XXXI. **Effect of Bi deficiency on grain alignment of BiPb-2223 thin film fabricated using rf sputtering process and on critical current density properties**  
AKSAN M. A., ALTIN S., YAKINCI M. C., GÜLDESTE A., BALCİ Y.  
MATERIALS SCIENCE AND TECHNOLOGY, vol.27, no.1, pp.314-319, 2011 (SCI-Expanded)
- XXXII. **Oxidation Behavior of Bi(Pb,Ga) SrCaCuO System**  
BALCİ Y., Ceylan M., AKSAN M. A., YAKINCI M. C.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.511-513, 2011 (SCI-Expanded)
- XXXIII. **Effects of In-situ and Ex-situ Heat-Treatment Procedures on the Transport Properties of the MgB<sub>2</sub> Superconducting Thin Films Fabricated by Ultrasonic Spray Pyrolysis (USP) System**  
YAKINCI M. C., Aydogdu Y., AKSAN M. A., BALCİ Y., ALTIN S.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.241-245, 2011 (SCI-Expanded)
- XXXIV. **Effect of Bi<sub>2</sub>O<sub>3</sub> Addition on the Single-Crystal BiSrCaCuO Whisker Growth**  
ALTIN S., AKSAN M. A., ALTIN E., BALCİ Y., YAKINCI M. C.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.331-339, 2011 (SCI-Expanded)
- XXXV. **Effect of Substrates on Superconducting Properties of MgB<sub>2</sub> Thick Films Fabricated by Spraying Method**  
ÖZABACI M., AKSAN M. A., YAKINCI M. C.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.357-363, 2011 (SCI-Expanded)
- XXXVI. **Normal State Electronic Properties of Whiskers Fabricated in Bi-, Ga- and Sb-doped BSCCO System Under Applied Magnetic Fields**  
ALTIN S., AKSAN M. A., YAKINCI M. C.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.443-448, 2011 (SCI-Expanded)
- XXXVII. **Nano-sized Spherical MgB<sub>2</sub> Superconducting Powder Fabrication Using MHz Range Ultrasonic Spray Pyrolysis (USP) System**  
YAKINCI M. C., AKSAN M. A., BALCİ Y., ALTIN S., ÖNAL Y., Aydogdu Y.

- JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.235-239, 2011 (SCI-Expanded)
- XXXVIII. Effect of Ce substitution on superconducting properties of Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>10+delta</sub> system fabricated by glass-ceramic technique**
- OZTURK R., AKSAN M. A., ALTIN S., YAKINCI M. C., BALCI Y.
- JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, pp.1105-1110, 2011 (SCI-Expanded)
- XXXIX. Kinetics of non-isothermal crystallization of Bi<sub>3</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3-x</sub>Sn<sub>x</sub>O<sub>10+delta</sub> glass-ceramics**
- Koralay H., Cavdar S., AKSAN M. A.
- PHYSICA B-CONDENSED MATTER, vol.405, no.23, pp.4801-4805, 2010 (SCI-Expanded)
- XL. Effects of SnO on growth and physical properties of BSCCO whiskers**
- ALTIN S., AKSAN M. A., BALCI Y., YAKINCI M. C.
- MATERIALS SCIENCE AND TECHNOLOGY, vol.26, no.9, pp.1125-1131, 2010 (SCI-Expanded)
- XLI. The single crystal superconducting Bi-2212 whiskers fabrication and their thermal transport properties**
- ALTIN S., AKSAN M. A., YAKINCI M. C., BALCI Y.
- JOURNAL OF ALLOYS AND COMPOUNDS, vol.502, no.1, pp.16-23, 2010 (SCI-Expanded)
- XLII. The Effect of Ru Substitution on the Thermal, Structural and Magnetic Properties of Bi<sub>3</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>10</sub> (delta) Superconducting System**
- AKSAN M. A., YAKINCI M. C., KADOWAKI K.
- JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.23, no.3, pp.371-380, 2010 (SCI-Expanded)
- XLIII. Transport Properties under Magnetic Field and J(c)(H) Peak Effect on Single-Crystal Bi-2212 Whiskers**
- ALTIN S., AKSAN M. A., BALCI Y., YAKINCI M. C.
- JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.22, no.8, pp.775-784, 2009 (SCI-Expanded)
- XLIV. A study on the thermoelectric power and thermal conductivity properties of the Y<sub>1-x</sub>N<sub>x</sub>Ba<sub>2</sub>Cu<sub>3</sub>O<sub>7-delta</sub> system**
- ADIGÜZEL H. İ., AKSAN M. A., YAKINCI M. C.
- JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.207, pp.258-264, 2008 (SCI-Expanded)
- XLV. The effect of Mo addition on the microstructure and J(c) properties of MgB<sub>2</sub> tapes fabricated by PIT method**
- Bayazit E., ALTIN S., YAKINCI M. C., AKSAN M. A., BALCI Y.
- JOURNAL OF ALLOYS AND COMPOUNDS, vol.457, pp.42-46, 2008 (SCI-Expanded)
- XLVI. Thermal and superconducting properties of glass-ceramic HT(c) BiSrCa(CuPr)O system**
- AKSAN M. A., YAKINCI M. C.
- JOURNAL OF MATERIALS PROCESSING TECHNOLOGY, vol.196, pp.365-372, 2008 (SCI-Expanded)
- XLVII. Structural characterization and transport properties of the HTc Bi<sub>2</sub>Sr<sub>2</sub>(Ca,Cd)Cu<sub>2</sub>O<sub>8+delta</sub> glass-ceramic rods**
- Aksan M. A., ALTIN S., BALCI Y., YAKINCI M. E.
- MATERIALS CHEMISTRY AND PHYSICS, vol.106, pp.428-436, 2007 (SCI-Expanded)
- XLVIII. Thermoelectric power and thermal conduction studies on the Nd substituted BPSCCO (2234) superconductors**
- Ozkurt B., Ocelik B., Kiymac K., AKSAN M. A., YAKINCI M. C.
- PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.467, pp.112-119, 2007 (SCI-Expanded)
- XLIX. Structural and physical properties of nd substituted bismuth cuprates Bi<sub>1.7</sub>Pb<sub>0.3</sub>-xN<sub>x</sub>Sr<sub>2</sub>Ca<sub>3</sub>Cu<sub>4</sub>O<sub>12+y</sub>**
- Oezkurt B., EKICIBIL A., Aksan M. A., Oezcelik B., Yakinci M. E., KIYMAC K.
- JOURNAL OF LOW TEMPERATURE PHYSICS, vol.149, pp.105-118, 2007 (SCI-Expanded)
- L. Magnetoresistance properties of Co-added MgB<sub>2</sub> tapes prepared by PIT method**
- BAYAZIT E., YAKINCI M. E., BALCI Y., Aksan M. A.
- PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.460, pp.610-611, 2007 (SCI-Expanded)
- LI. Effects of thickness on the grain alignment and J(c) properties of (Hg<sub>0.8</sub>Re<sub>0.2</sub>)Ba<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub> superconductor thick films**

- YAKINCI M. E., Aksan M. A., BALCI Y., ALTIN S.  
 PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.460, pp.1386-1387, 2007 (SCI-Expanded)
- LII. Effects of preparation pressure on the magnetic and I-V properties of nano Cu particles added MgB<sub>2</sub> tapes  
 YAKINCI Z. D., BALCI Y., YAKINCI M. E., Aksan M. A.  
 PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.460, pp.859-861, 2007 (SCI-Expanded)
- LIII. Fabrication and properties of superconducting single crystal cross-(micro) whiskers junction  
 ALTIN S., YAKINCI M. E., Aksan M. A., BALCI Y.  
 PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.460, pp.1337-1338, 2007 (SCI-Expanded)
- LIV. Magnetoresistance behavior in the (BiPb)(2)Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub> thin films  
 Aksan M. A., YAKINCI M. E., GULDESTE A.  
 THIN SOLID FILMS, vol.515, pp.8022-8027, 2007 (SCI-Expanded)
- LV. Effect of Mo substitution on the structural and transport properties of Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3-x</sub>Mo<sub>x</sub>O<sub>10+y</sub> system  
 Aksan M. A., YAKINCI M. E.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.433, pp.22-32, 2007 (SCI-Expanded)
- LVI. Thermoelectric power and thermal conduction studies on the Gd substituted BPSCCO (2234) superconductors  
 OZKURT B., EKICIBIL A., Aksan M. A., OZCELIK B., YAKINCI M. E., KIYMAC K.  
 JOURNAL OF LOW TEMPERATURE PHYSICS, vol.147, pp.31-48, 2007 (SCI-Expanded)
- LVII. Co-addition into WgB(2): The structural and electronic properties of (MgB<sub>2</sub>)(2-x)Co<sub>x</sub>  
 Aksan M. A., YAKINCI M. E., GULDESTE A.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.424, pp.33-40, 2006 (SCI-Expanded)
- LVIII. An analysis of load-depth data in depth-sensing microindentation experiments for intermetallic MgB<sub>2</sub>  
 KOLEMEN U., UZUN O., Aksan M. A., GUCLU N., YAKINCI M.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.415, pp.294-299, 2006 (SCI-Expanded)
- LIX. Degradation of superconducting properties in MgB<sub>2</sub> by Cu addition  
 Aksan M. A., GULDESTE A., BALCI Y., YAKINCI M.  
 SOLID STATE COMMUNICATIONS, vol.137, no.6, pp.320-325, 2006 (SCI-Expanded)
- LX. Thermal analysis study of Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3-x</sub>Er<sub>x</sub>O<sub>10+y</sub> glass-ceramic system  
 Aksan M. A., YAKINCI M., BALCI Y.  
 JOURNAL OF THERMAL ANALYSIS AND CALORIMETRY, vol.81, no.2, pp.417-423, 2005 (SCI-Expanded)
- LXI. Fabrication and properties of (Hg0.8Re0.2)Ba<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>x</sub> superconducting thick films  
 YAKINCI M., Aksan M. A., BALCI Y.  
 SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.18, no.4, pp.494-502, 2005 (SCI-Expanded)
- LXII. Synthesis and characterization of Er-substituted Bi-2223 H-T-c glass-ceramic superconductors  
 Aksan M. A., YAKINCI M.  
 JOURNAL OF ALLOYS AND COMPOUNDS, vol.385, pp.33-43, 2004 (SCI-Expanded)
- LXIII. Enhanced J<sub>c</sub> properties of MgB<sub>2</sub> materials processed under a magnetic field  
 Aksan M. A., YAKINCI M., BALCI Y.  
 PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.408, pp.132-133, 2004 (SCI-Expanded)
- LXIV. Thermoelectric power and thermal conductivity properties in superconducting (MgB<sub>2</sub>)(2-x)Cr<sub>x</sub> materials  
 YAKINCI M., BALCI Y., Aksan M. A.  
 PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.408, pp.684-685, 2004 (SCI-Expanded)
- LXV. Effect of substrates on I-c anisotropy in thick film Bi<sub>1.7</sub>Ga<sub>0.3</sub>Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>10+y</sub> glass-ceramic superconductors  
 YAKINCI Z., BALCI Y., YAKINCI M., Aksan M. A.  
 PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.408, pp.900-901, 2004 (SCI-Expanded)
- LXVI. Study on the physical and electrical properties of Bi<sub>2</sub>-delta Zn delta Sr<sub>2</sub>Ca<sub>2</sub>Cu<sub>3</sub>O<sub>10+y</sub> glass-ceramic

- superconductors**
- Aksan M. A., YAKINCI M., BALCI Y.  
JOURNAL OF SUPERCONDUCTIVITY, vol.15, no.6, pp.553-558, 2002 (SCI-Expanded)
- LXVII. **Crystallization activation energy and hole concentration properties of the  $\text{Bi}_2\text{Sr}_2\text{Ca}_{1-x}\text{Cd}_x\text{Cu}_2\text{O}_{8+y}$  glass-ceramic superconductor rods**  
OZHANLI Z., YAKINCI M., BALCI Y., Aksan M. A.  
JOURNAL OF SUPERCONDUCTIVITY, vol.15, no.6, pp.543-547, 2002 (SCI-Expanded)
- LXVIII. **Degradation of superconducting properties in  $\text{MgB}_2$  by formation of the  $\text{MgB}_4$  phase**  
YAKINCI M., BALCI Y., Aksan M. A., ADIGUZEL H. İ., GENCER A.  
JOURNAL OF SUPERCONDUCTIVITY, vol.15, no.6, pp.607-611, 2002 (SCI-Expanded)
- LXIX. **Synthesis and characterization of glass-ceramic  $\text{Bi}_{2-x}\text{Ga}_x\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+y}$  superconductors**  
Aksan M. A., YAKINCI M., BALCI Y.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.13, no.7, pp.955-963, 2000 (SCI-Expanded)
- LXX. **In-situ single chamber arc sputtering process for  $\text{YCd}_{0.3}\text{Ba}_2\text{Cu}_3\text{O}_{7-\delta}$  superconducting thin films**  
YAKINCI M., BALCI Y., Aksan M. A., AYDOĞDU Y., ATES H.  
JOURNAL OF LOW TEMPERATURE PHYSICS, vol.117, pp.645-649, 1999 (SCI-Expanded)
- LXXI. **Thermal conductivity properties of glass-ceramic ( $\text{Bi}_{2-\delta}\text{Ga}_\delta\text{Tl}_\gamma\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+x}$ ) high-T<sub>c</sub> superconductors**  
BALCI Y., YAKINCI M., Aksan M. A., OZDES A., ATES H.  
JOURNAL OF LOW TEMPERATURE PHYSICS, vol.117, pp.963-967, 1999 (SCI-Expanded)
- LXXII. **Thermal conductivity properties of  $\text{Bi}_2\text{-alpha Tl alpha Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10+z}$  glass-ceramic HTc superconductor rods**  
Aksan M. A., YAKINCI M., BALCI Y., ATES H.  
JOURNAL OF LOW TEMPERATURE PHYSICS, vol.117, pp.957-961, 1999 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Optimizing Hysteresis Width in Ni-Mn-Sb Shape Memory Alloys**  
KIRAT G., AKSAN M. A.  
4th International Conference on Physical Chemistry and Functional Materials (PCFM'21), Elazığ, Turkey, 08 April 2021
- II. **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
- III. **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
- IV. **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
- V. **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 (ICCMMS-2017), 11 October 2017 - 15 January 2018, pp.55
- VI. **Temperature dependence of the interlayer transport mechanism of Bi 2212**  
KIZILASLAN O., SİMSEK Y., AKSAN M. A., KOVAL Y., MULLER P.  
5th international conference on superconductivity and magnetism 2016, 24 - 30 April 2016
- VII. **Effect of the Er-Substitution on Critical Current Density in Glass-Ceramic  $\text{Bi}_2\text{Sr}_2\text{Ca}_2(\text{Cu}_3\text{-xEr}_x)\text{O}_{10+\delta}$  Superconducting System**

- KIRAT G., KIZILASLAN O., AKSAN M. A.  
5th International Conference on Superconductivity and Magnetism, Muğla, Turkey, 24 - 30 April 2016, pp.533
- VIII. **Phase purity as a factor controlling the magnetic properties of CaO-Al<sub>2</sub>O<sub>3</sub>-SiO<sub>2</sub> (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
- IX. **Effect of the Er-substitution on critical current density in glassceramic Bi<sub>2</sub>Sr<sub>2</sub>Ca<sub>2</sub>(Cu<sub>3-x</sub>Er<sub>x</sub>)O<sub>10+x</sub> Superconducting System**  
KIRAT G., KIZILASLAN O., AKSAN M. A.  
International Conference on Superconductivity and Magnetism-ICSM2016, FETHİYE, Turkey, 01 April 2016
- X. **Interlayer Tunneling Spectroscopy of Mixed Phase BSCCO Superconducting Whisker**  
KIZILASLAN O., Yilmaz S., AKSAN M. A., Marco T., Yuri K., Paul M.  
The 8th Asian Conference on Applied Superconductivity and Cryogenics, 22 - 25 November 2015
- XI. **The effects of composition on the magnetization and shape memory behavior of NiMnSn alloys**  
AYDOĞDU Y., KÖK M., TURABİ A., AYDOĞDU A., YAKINCI Z. D., AKSAN M. A., YAKINCI M. E., HALUK K.  
9th international conference and superconducting materials, Antalya, Turkey, 30 April - 03 May 2015
- XII. **Role of the Fe and Ni substitutionin magnetic behavior of the glass ceramic cordierite system**  
GÖKHAN K., MURAT Ö., KIZILASLAN O., AKSAN M. A., YAKINCI M. E.  
9th international confererence on magnetic and superconducting material, 30 April - 03 May 2015
- XIII. **Magnetic Relaxation Studies on Bi 2212Textured superconductor**  
Murat Ö., KIZILASLAN O., Gökhan K., AKSAN M. A., Andre S., YAKINCI M. E.  
9th international confererence on magnetic and superconducting material, 30 April - 03 May 2015
- XIV. **enhancement of the critical current of intrinsic josephson junctions by carrier injection**  
KIZILASLAN O., Yilmaz S., AKSAN M. A., Koval Y., YAKINCI M. E., Müller P.  
9th international conference on magnetic and superconducting material, 30 April - 03 May 2015
- XV. **Effects of boron addition on the physical properties of CuAlMn shape memory alloys**  
AYDOĞDU Y., KIRAT G., KÖK M., TURABİ A., AYDOĞDU A., AKSAN M. A., KARACA H.  
MSM15, Antalya, Turkey, 01 April 2015
- XVI. **Normal state electronic properties under applied magnetic fields of whiskers fabricated by Bi Ga and Sb doping**  
ALTIN S., AKSAN M. A., BALCİ Y., ALTIN E., YAKINCI M. E.  
2 nd International Conference On Superconductivity and Magnetism Antalya, Turkey, 2010, 28 - 30 May 2010
- XVII. **Power Law Dependences on I V of Bi 212 Whiskers at Low Magnetic fields**  
ALTIN S., AKSAN M. A., BALCİ Y., ALTIN E., YAKINCI M. E.  
2 nd International Conference On Superconductivity and Magnetism Antalya, Turkey, 2010, 28 - 30 May 2010
- XVIII. **Pinning Properties of Bi-2212 Single Crystal Whiskers**  
ALTIN S., AKSAN M. A., BALCİ Y., YAKINCI M. C.  
International Conference on Superconductivity and Magnetism (ICSM), Side, Turkey, 25 - 29 August 2008, vol.153
- XIX. **Magnetoresistance properties of MgB<sub>2</sub> thick films on YSZ substrate using spray pyrolysis method**  
ALTIN S., AKSAN M. A., YAKINCI Z. D., Oezabaci M., BALCİ Y., YAKINCI M. C.  
International Conference on Superconductivity and Magnetism (ICSM), Side, Turkey, 25 - 29 August 2008, vol.153
- XX. **Çökelme Yöntemi Kullanılarak MgB<sub>2</sub> Kalın Filmlerin Hazırlanması ve Karakterizasyonu**  
YAKINCI Z. D., ALTIN E., türk n., ALTIN S., ÖZABACI M., AKSAN M. A., BALCİ Y., YAKINCI M. E.  
II. Ulusal Bor Çalıştayı, Ankara, 2008, Turkey, 20 - 22 June 2008
- XXI. **Dip Coating Yöntemi İle Şerit MgB<sub>2</sub> Süperiletkenlerin Eldesi ve Karakterizasyonu**  
ÖZABACI M., ALTIN S., gülşah K., YAKINCI Z. D., ALTIN E., AKSAN M. A., BALCİ Y., YAKINCI M. E.  
II. Ulusal Bor Çalıştayı, Ankara, 2008, Turkey, 13 - 15 June 2008
- XXII. **Magnetoresistance properties of Co added MgB<sub>2</sub> tapes prepared by PIT method**  
ALTIN E., BALCİ Y., AKSAN M. A., YAKINCI M. E.  
8th International Conference on Materials and Mechanisms of Superconductivity and High Temperature Superconductors, Dresden (Germany), 9 - 14 July 2006

**XXIII. Magnetic Properties of Mo Substituted MgB<sub>2</sub> Superconductor Tapes**

ALTIN E., AKSAN M. A., YAKINCI M. E., ALTIN S.

6th International Conference of The Balkan Physical Union, 6 - 08 July 2006

**XXIV. Co Katkılı MgB<sub>2</sub> Süperiletken Sistem**

ALTIN E., BALCI Y., AKSAN M. A., YAKINCI M. E.

III. Ulusal Yüksek Sıcaklık Süperiletkenler Sempozyumu, BOLU, Turkey, 20 - 22 June 2005

### **Supported Projects**

AKSAN M. A., AYYILDIZ M., Project Supported by Higher Education Institutions, NiMnIn Bazlı Şekil Hatırlama Sistemine Cu ve Cr Katkılarının Elektrik ve Manyetik Özelliklere Etkileri, 2022 - 2023

AKSAN M. A., KIRAT G., AYYILDIZ M., Project Supported by Higher Education Institutions, NiMnSn ESASLI

FERROMANYETİK ŞEKİL HATIRLAMALI ŞERİTLERDEN MANYETİK ALAN SENSÖRLERİNİN ÜRETİMİ, 2020 - 2021

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

AKSAN M. A., Project Supported by Higher Education Institutions, 3-NOKTA KONTAK ÖLÇÜMLERİNDE KONTAK DİRENCİNİN ORTADAN KALDIRILMASI İÇİN YENİ BİR YÖNTEM, 2015 - 2018

ÇIRAK Z. D., AKSAN M. A., TUBITAK Project, Bor Katkılı Polikristal Metamanyetik Şekil Hafızalı Alaşımın Üretimi, Karakterizasyonu Ve Teknolojik Uygulamaları, 2013 - 2017

AKSAN M. A., TUBITAK Project, Taşıyıcı Enjeksiyon Metodu İle Bi-Bazlı HTc Süperiletken Whiskerlar' dan Hazırlanan Josephson Eklemelerde Süperiletkenliğin Ayarlanması, 2014 - 2016

ÖZDEMİR N., AKSAN M. A., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, İnönü Üniversitesi Bilimsel ve Teknolojik Araştırma Merkezi (İBTAM) Altyapı Geliştirme Çalışması, 2010 - 2013

AKSAN M. A., TUBITAK Project, Süperiletken Doğal (Öz) Josephson Eklem (IJJ) Üretimi, Karakterizasyonu Ve Teknolojik Uygulaması, 2010 - 2012

AKSAN M. A., Project Supported by Other Official Institutions, Ultrasonic Spray Pyrolysis (USP) Yöntemi ile Küresel Magnezyum Diboride (MgB<sub>2</sub>) Nano-tozların Elde Edilmesi ve Teknolojik Uygulaması, 2008 - 2010

AKSAN M. A., TUBITAK Project, İki Yönlü Şekil Hafızalı Alaşım Üretimi, Termal ve Elektriksel Özelliklerinin Belirlenmesi ve Endüstriyel Uygulamaları, 2007 - 2009

### **Activities in Scientific Journals**

The Scientific World Journal (Condensed Matter), Editor, 2012 - Continues

Journal of Superconductivity and Novel Magnetism, Special Issue Editor, 2017 - 2017

### **Metrics**

Publication: 98

Citation (WoS): 590

Citation (Scopus): 551

H-Index (WoS): 14

H-Index (Scopus): 14

### **Non Academic Experience**

İNÖNÜ ÜNİVERSİTESİ

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