

Prof. UĞUR KÖLEMEN

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Publons / Web Of Science ResearcherID: AFS-4600-2022

ScopusID: 9746931000

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Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 1997 - 2002

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik (Yl) (Tezli), Turkey 1992 - 1996

Undergraduate, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1985 - 1992

Dissertations

Doctorate, ZnO ilavesinin YBa₂Cu₃O_{7-x} süperiletkenlerin yapısal, mekaniksel ve manyetik özellikleri üzerine etkisi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik, 2002

Postgraduate, Gümüş difüzyonunun YBaCuO süperiletkenlerinin yapısal ve süperiletkenlik özelliklerine etkisi, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Fizik (Yl) (Tezli), 1996

Research Areas

Structure of Liquids and Solids; Crystallography, Mechanical and Acoustic Properties of Condensed Matter, Thermal Properties of Condensed Matter, Surfaces, Interfaces, Thin Films and Nanosystems, Magnetic Properties and Materials, Superconductivity

Academic Titles / Tasks

Professor, Yozgat Bozok University, Fen-Edebiyat Fakültesi, Fizik, 2019 - Continues

Professor, Giresun University, Faculty Of Arts And Sciences, Department Of Physics, 2017 - 2019

Professor, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 2013 - 2017

Associate Professor, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 2008 - 2013

Assistant Professor, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 2004 - 2008

Research Assistant, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 2002 - 2004

Research Assistant, Karadeniz Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, 1999 - 2002

Research Assistant, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, 1993 - 1999

Academic and Administrative Experience

Secretary General, Yozgat Bozok University, 2019 - Continues
Tokat Gaziosmanpaşa University, 2009 - 2013
Tokat Gaziosmanpaşa University, 2007 - 2010
Tokat Gaziosmanpaşa University, 2005 - 2006

Courses

Araştırmaya Giriş-I , Undergraduate, 2012 - 2013, 2011 - 2012
Dinamik Sertlik Analizi-I, Postgraduate, 2012 - 2013, 2011 - 2012
Yüksek Sıcaklık Süperiletkenleri, Postgraduate, 2012 - 2013
Kathal Fiziği -II , Undergraduate, 2012 - 2013, 2011 - 2012
Süperiletkenlik, Undergraduate, 2012 - 2013, 2011 - 2012
Katıların Elastik ve Plastik Deformasyonu, Postgraduate, 2012 - 2013
Maddenin Yapı ve Özellikleri , Undergraduate, 2012 - 2013
Kathal Fiziği -I , Undergraduate, 2012 - 2013
Araştırmaya Giriş-II , Undergraduate, 2012 - 2013, 2011 - 2012
Katıların Termal Analizi, Postgraduate, 2011 - 2012
Kathal Fiziği-I , Undergraduate, 2011 - 2012
Süperiletkenlerin Manyetik Özellikleri, Postgraduate, 2011 - 2012
Elektronik Lab-I , Undergraduate, 2011 - 2012
Malzeme Bilgisi, Undergraduate, 2004 - 2005

Advising Theses

KÖLEMEN U., Yüksek sıcaklık TiVaL şekil hafızalı alaşımlarda zirkonyum içeriğinin mekaniksel ve şekil hafıza özellikleri üzerine etkisi, Doctorate, Ö.BAĞ(Student), 2020
KÖLEMEN U., İndüksiyonla ergitme ve eriyik eğirme teknikleri ile Al-5Cu-XSc (x= 0.5 and 1.0) alaşımlarının üretimi ve mekanik karakterizasyonu, Doctorate, C.TEMİZ(Student), 2019
KÖLEMEN U., Ag/SiO_x-DLC/p-Si Schottky diyodun elektriksel karakterizasyonu, Postgraduate, E.GÖÇER(Student), 2016
KÖLEMEN U., Malik asit (C₄H₆O₅) katkılı MgB₂ süperiletkeninin mekaniksel özellikleri, Postgraduate, S.ERYILMAZ(Student), 2015
KÖLEMEN U., Hızlı katılaştırılmış Al-Sc alaşımlarının mekanik ve triboloji özelliklerinin incelenmesi, Postgraduate, Y.YILMAZ(Student), 2015
KÖLEMEN U., Elmas-benzeri karbon ince filmin Schottky diyot parametreleri üzerine etkisi, Postgraduate, N.ASLAN(Student), 2013
KÖLEMEN U., Sol-jel yöntemiyle elde edilen bor katkılı ZnO ince filmlerin yapısal, optiksel ve elektriksel özelliklerinin incelenmesi, Postgraduate, G.BABÜR(Student), 2012
KÖLEMEN U., Farklı akı dinamiği etkileri için yüksek sıcaklık süperiletkenlerin mikrodalga yüzey direncinin modellenmesi, Doctorate, Ş.YILDIZ(Student), 2011
KÖLEMEN U., RuSr₂RECu₂O₈ (RE = Eu, Gd and Ho) süper iletkenlerinin mekaniksel özelliklerinin nanoçentme ve atomik kuvvet mikroskobu ile incelenmesi, Postgraduate, U.ALPA(Student), 2011
KÖLEMEN U., Üstten tohumlamalı eriyik büyütme yöntemi ile üretilmiş YBaCuO tek kristal süperiletkeninin mekaniksel ve manyetik özelliklerinin incelenmesi, Postgraduate, C.MERT(Student), 2010
KÖLEMEN U., MgB₂ süperiletkeninin mekaniksel özellikleri üzerine tavlama süresinin etkisi, Postgraduate, Ö.BOYNUDELİK(Student), 2008
KÖLEMEN U., MgB₂ süperiletkeninin gerçek sertlik değerinin dinamik mikrosertlik tekniğiyle incelenmesi, Postgraduate, İ.ERKAN(Student), 2007

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Green synthesis of silver nanoparticles using Sambucus ebulus leaves extract: Characterization, quantitative analysis of bioactive molecules, antioxidant and antibacterial activities**
Karan T., GÖNÜLALAN Z., Erenler R., KÖLEMEN U., Eminagaoglu O.
Journal of Molecular Structure, vol.1296, 2024 (SCI-Expanded)
- II. **Biogenic synthesis of silver nanoparticles using Sambucus nigra leaves: elucidation, antimicrobial, antioxidant activities and quantification of phenolics**
KARAN T., Erenler R., GÖNÜLALAN Z., KÖLEMEN U.
Chemical Papers, vol.78, no.1, pp.473-481, 2024 (SCI-Expanded)
- III. **Investigation of microstructures and mechanical properties of Sc doped Al-5Cu alloys**
Temiz C., Yilmaz F., KOLEMEN U.
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.37, no.1, pp.75-88, 2022 (SCI-Expanded)
- IV. **Transformational, microstructural and superelasticity characteristics of Ti-V-Al high temperature shape memory alloys with Zr addition**
Bag O., YILMAZ F., KOLEMEN U., ERGEN S., Temiz C., Uzun O.
PHYSICA SCRIPTA, vol.96, no.8, 2021 (SCI-Expanded)
- V. **Influence of Al content on transformation temperature and activation energy of Ti-V-Al high temperature shape memory alloys**
Bag O., ERGEN S., YILMAZ F., KÖLEMEN U.
SOLID STATE COMMUNICATIONS, vol.323, 2021 (SCI-Expanded)
- VI. **Electrodeposition of Si-DLC nanocomposite film and its electronic application**
Basman N., Uzun R., Gocer E., BACAKSIZ E., KOLEMEN U.
MICROSYSTEM TECHNOLOGIES-MICRO-AND NANOSYSTEMS-INFORMATION STORAGE AND PROCESSING SYSTEMS, vol.24, no.5, pp.2287-2294, 2018 (SCI-Expanded)
- VII. **Structural and mechanical properties of hypereutectic AlSiFe powders and a new method for determination of sintering temperature**
Ergen S., Yilmaz F., Gul S., KOLEMEN U., Kilicaslan M. F., Uzun O.
ADVANCED POWDER TECHNOLOGY, vol.29, no.3, pp.563-572, 2018 (SCI-Expanded)
- VIII. **Interpolated mapping and investigation of environmental radioactivity levels in soils and mushrooms in the Middle Black Sea Region of Turkey**
Turkecul I., Yesilkanat C. M., Ciris A., KOLEMEN U., ÇEVİK U.
ISOTOPES IN ENVIRONMENTAL AND HEALTH STUDIES, vol.54, no.3, pp.262-273, 2018 (SCI-Expanded)
- IX. **CORRELATION OF HARDNESS AND SILICON MORPHOLOGY FOR Al-Si-Sb ALLOY**
Uzun O., Yilmaz F., Emeksiz C., Ergen S., KOLEMEN U.
ARCHIVES OF METALLURGY AND MATERIALS, vol.63, no.1, pp.467-472, 2018 (SCI-Expanded)
- X. **Microindentation on the porous copper surface modulations**
Ekmekci D., Yilmaz F., KOLEMEN U., CORA Ö. N.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.123, no.11, 2017 (SCI-Expanded)
- XI. **Electrical characterization of metal/diamond-like carbon/inorganic semiconductor MIS Schottky barrier diodes**
Basman N., Aslan N., Uzun O., ÇANKAYA G., KOLEMEN U.
MICROELECTRONIC ENGINEERING, vol.140, pp.18-22, 2015 (SCI-Expanded)
- XII. **Physical and Mechanical Properties of B2O3 doped YBaCuO Superconductors: Applicability as a Low DC Magnetometer**
Coker E. G., KOLEMEN U., Topal U.

- JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.28, no.2, pp.513-518, 2015 (SCI-Expanded)
- XIII. **Mechanical Characterization of Ruthenocuprates by Nanoindentation Technique**
Alp U., Yilmaz F., Uzun O., Topal U., Ergen S., Kolemen U.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.28, no.2, pp.519-523, 2015 (SCI-Expanded)
- XIV. **Calculation of True Hardness Value of Zn added (BiPb)SrCaCuO Superconductor by Different Models**
Toplu A., Karaca I., Kolemen U.
CERAMICS INTERNATIONAL, vol.41, no.1, pp.953-960, 2015 (SCI-Expanded)
- XV. **The Role of Weak Links and Zn-Doping on Magnetic Parameters of High-T (c) Superconductors**
Topal U., Coker E. G., Alikma F., Kolemen U., Uzun O.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.27, no.1, pp.133-141, 2014 (SCI-Expanded)
- XVI. **Synthesis of sol-gel derived nano-crystalline ZnO thin films as TCO window layer: effect of sol aging and boron**
Varol S. F., Babur G., ÇANKAYA G., Kolemen U.
RSC ADVANCES, vol.4, no.100, pp.56645-56653, 2014 (SCI-Expanded)
- XVII. **Nanoindentation study on Gd-deposited YBaCuO superconductor**
Yilmaz F., Uzun O., Kolemen U., Kilicaslan M. F., Basman N., Ergen S., ÖZTÜRK K., Yanmaz E.
BULLETIN OF MATERIALS SCIENCE, vol.36, no.7, pp.1139-1145, 2013 (SCI-Expanded)
- XVIII. **Mechanical Properties of BSCCO Superconductor by Oliver-Pharr Method and Work of Indentation Approach**
Kolemen U., Uzun O., Emeksiz C., Yilmaz F., Coskun A., EKİCİBİL A., ÖZÇELİK B.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.11, pp.3215-3219, 2013 (SCI-Expanded)
- XIX. **A theoretical study for temperature dependence of levitation force of high-T-c superconductors**
Inanir F., Yildiz S., Okutan M., Kolemen U.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.485, pp.30-34, 2013 (SCI-Expanded)
- XX. **Measurements of ultra-low DC fields by high-T-c superconducting cores: The effect of calcination temperature**
Topal U., Alikma F., Birlikseven C., Uzun O., Kolemen U.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.530, pp.91-96, 2012 (SCI-Expanded)
- XXI. **AC susceptibility study of YBCO**
Guclu N., Kolemen U.
MATERIALS SCIENCE-POLAND, vol.29, no.3, pp.209-215, 2011 (SCI-Expanded)
- XXII. **Study of microwave surface resistance of type-II superconductors carrying transport current**
Yildiz S., Inanir F., Kolemen U.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.248, no.6, pp.1477-1482, 2011 (SCI-Expanded)
- XXIII. **Investigation of mechanical and creep properties of polypyrrole by depth-sensing indentation**
Uzun O., Basman N., Alkan C., Kolemen U., Yilmaz F.
POLYMER BULLETIN, vol.66, no.5, pp.649-660, 2011 (SCI-Expanded)
- XXIV. **Calculation of the beta-material for Bulk MgB₂ Superconductor**
Guclu N., Uzun O., Kolemen U.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, no.1-2, pp.371-373, 2011 (SCI-Expanded)
- XXV. **Low Field AC Susceptibility Study of YBCO Prepared by Top Seeded Melt Growth**
Guclu N., Yesilkanat C. M., Agil H., Dogan F., GENÇER A., Kolemen U.
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.24, no.1-2, pp.261-264, 2011 (SCI-Expanded)
- XXVI. **Sb effect on micro structural and mechanical properties of rapidly solidified Al-12Si alloy**
Uzun O., Yilmaz F., Kolemen U., Basman N.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.1, pp.21-26, 2011 (SCI-Expanded)
- XXVII. **Depth sensing indentation analysis of electrochemically synthesized polythiophene**
Uzun O., Basman N., Alkan C., Kolemen U., Yilmaz F.
MATERIALS CHEMISTRY AND PHYSICS, vol.124, no.1, pp.196-202, 2010 (SCI-Expanded)
- XXVIII. **Effects of Meissner surface current on the microwave surface resistance of type-II superconductors**
Yildiz S., Inanir F., Kolemen U.

- PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.470, no.13-14, pp.575-581, 2010 (SCI-Expanded)
- XXIX. **Work of indentation approach to load-penetration depth data in bulk BSCCO superconductor**
Uzun O., Güçlü N., Kölemen U.
Optoelectronics and Advanced Materials, Rapid Communications, vol.4, no.3, pp.332-335, 2010 (SCI-Expanded)
- XXX. **Effects of ZnO addition on mechanical properties of Bi_{1.84}Pb_{0.34}Sr_{1.91}Ca_{2.03}Cu_{3.06}O₁₀ prepared by a wet technique**
Karaca I., Uzun O., Koelemen U., Yilmaz F., Sahin O.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.476, no.1-2, pp.486-491, 2009 (SCI-Expanded)
- XXXI. **Analysis of data on indentation load against penetration depth for bulk MgB₂ crystal using indentation work and Oliver-Pharr approaches**
Uzun O., Guclu N., Koelemen U., Sahin O.
MATERIALS CHEMISTRY AND PHYSICS, vol.112, no.1, pp.5-10, 2008 (SCI-Expanded)
- XXXII. **Analysis of ISE in dynamic hardness measurements of beta-Sn single crystals using a depth-sensing indentation technique**
Sahin O., Uzun O., Koelemen U., UÇAR N.
MATERIALS CHARACTERIZATION, vol.59, no.6, pp.729-736, 2008 (SCI-Expanded)
- XXXIII. **Mechanical characterization for beta-Sn single crystals using nanoindentation tests**
Sahin O., Uzun O., Koelemen U., UÇAR N.
MATERIALS CHARACTERIZATION, vol.59, no.4, pp.427-434, 2008 (SCI-Expanded)
- XXXIV. **Analysis of load-penetration depth data using Oliver-Pharr and Cheng-Cheng methods of SiAlON-ZrO₂ ceramics**
Sahin O., Uzun O., Sopicka-Lizer M., Gocmez H., Koelemen U.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.41, no.3, 2008 (SCI-Expanded)
- XXXV. **Dynamic hardness and elastic modulus calculation of porous SiAlON ceramics using depth-sensing indentation technique**
Sahin O., Uzun O., Sopicka-Lizer M., Gocmez H., Koelemen U.
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.28, no.6, pp.1235-1242, 2008 (SCI-Expanded)
- XXXVI. **Dynamic hardness and reduced modulus determination on the (001) face of beta-Sn single crystals by a depth sensing indentation technique**
Sahin O., Uzun O., Koelemen U., Ucar N.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.19, no.30, 2007 (SCI-Expanded)
- XXXVII. **Stress exponent investigation of beta-Sn single crystal by depth-sensing indentation tests**
Sahin O., Uzun O., Koelemen U., Ucar N.
PHYSICA B-CONDENSED MATTER, vol.396, no.1-2, pp.87-90, 2007 (SCI-Expanded)
- XXXVIII. **Vickers microindentation hardness studies of beta-Sn single crystals**
Sahin O., Uzun O., Koelemen U., Ucar N.
MATERIALS CHARACTERIZATION, vol.58, no.2, pp.197-204, 2007 (SCI-Expanded)
- XXXIX. **Analysis of ISE in microhardness measurements of bulk MgB₂ superconductors using different models**
Koelemen U.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.425, no.1-2, pp.429-435, 2006 (SCI-Expanded)
- XL. **Observations of a hysteresis loss valley in yttrium barium copper oxide superconductors**
Celebi S., Ozturk A., Koelemen U., LeBlanc M. A. R.
JOURNAL OF APPLIED PHYSICS, vol.100, no.7, 2006 (SCI-Expanded)
- XLI. **Depth-sensing indentation study of superconducting MgB₂ wire**
Guclu N., Uzun O., Koelemen U.
MATERIALS CHARACTERIZATION, vol.57, no.3, pp.166-170, 2006 (SCI-Expanded)
- XLII. **Eudragit S (methyl methacrylate methacrylic acid copolymer)/fatty acid blends as form-stable phase change material for latent heat thermal energy storage**
Sari A., Alkan C., Koelemen U., Uzun O.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.101, no.3, pp.1402-1406, 2006 (SCI-Expanded)

- XLIII. **An analysis of load-depth data in depth-sensing microindentation experiments for intermetallic MgB₂**
Kolemen U., Uzun O., Aksan M. A., Guclu N., Yakinci M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.415, no.1-2, pp.294-299, 2006 (SCI-Expanded)
- XLIV. **Hardness and microstructural analysis of Bi_{1.6}Pb_{0.4}Sr₂Ca_{2-x}Sm_xCu₃O_y polycrystalline superconductors**
Kolemen U., Uzun O., Yilmazlar M., Guclu N., Yanmaz E.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.415, no.1-2, pp.300-306, 2006 (SCI-Expanded)
- XLV. **Work of indentation approach for investigation of mechanical properties of YBCO bulk superconductor at cryogenic temperatures**
Guclu N., Kolemen U., Uzun O., Celebi S.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.433, no.1-2, pp.115-122, 2005 (SCI-Expanded)
- XLVI. **Indentation size effect and microhardness study of beta-Sn single crystals**
Sahin O., Uzun O., Kolemen U., Duzgun B., Ucar N.
CHINESE PHYSICS LETTERS, vol.22, no.12, pp.3137-3140, 2005 (SCI-Expanded)
- XLVII. **Modulus and hardness evaluation of polycrystalline superconductors by dynamic microindentation technique**
Uzun O., Kolemen U., Celebi S., Guclu N.
JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol.25, no.6, pp.969-977, 2005 (SCI-Expanded)
- XLVIII. **Structural and low-field magnetic characterization of superconducting MgB₂ wires**
Kilic A., Okur S., Guclu N., Koleman U., Uzun O., Ozyuzer L., Gencer A.
PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS, vol.415, no.1-2, pp.51-56, 2004 (SCI-Expanded)
- XLIX. **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, no.1-2, pp.20-26, 2004 (SCI-Expanded)
- L. **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)
- LI. **Effect of ZnO additions on the magnetic behaviour in YBCO superconductors**
Çelebi S., Kölemen U., Malik A., ÖZTÜRK A.
Physica Status Solidi (A) Applied Research, vol.194, no.1, pp.260-270, 2002 (SCI-Expanded)
- LII. **The effect of potassium doping on resistive transitions and transport critical current of bulk YBCO high-T_c superconductors**
Çelebi S., ÖZTÜRK A., Karaca I., Kölemen U.
Turkish Journal of Physics, vol.24, no.4, pp.567-576, 2000 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **KENEVİR ESASLI BATARYA GELİŞTİRİLMESİ**
YİĞİT İ., KÖLEMEN U., KARADAĞ A.
7. Uluslararası Bilimsel Araştırmalar Kongresi, 13 - 14 March 2020
- II. **Kenevir Esaslı Batarya Geliştirilmesi**
YİĞİT İ., KÖLEMEN U., KARADAĞ A.
UBAK - Uluslararası Bilimsel Araştırmalar Kongresi, Ankara, Turkey, 13 - 14 March 2020, vol.1, pp.209-221

Metrics

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H-Index (WoS): 16
H-Index (Scopus): 16

Artistic Activity

KÖLEMEN U., IX. UTIB Turkish Textile and Clothing Sector International RD Brokerage, April 2017