

Asst. Prof. Mehmet Kuru

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-5025-2019

ScopusID: 56375163100

Yoksis Researcher ID: 111122

Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Malzeme Bilimi Ve Mühendisliği (Dr), Turkey 2014 - 2018

Postgraduate, Sakarya University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2009 - 2011

Undergraduate, Sakarya University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2005 - 2009

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, RF magnetron saçtırma yöntemi ile üretilen SmCo5 filmlerin yapısal, mekanik ve manyetik özellikleri ve süper iletken kalıcıanahtar uygulaması, Erciyes University, Fen Bilimleri Enstitüsü, Malzeme Bilimi Ve Mühendisliği (Dr), 2018

Postgraduate, Vanadyum karbür kristalinin titreşim ve süperiletkenlik özelliklerinin incelenmesi, Sakarya University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2011

Research Areas

Semiconductor and Superconductor Materials, Plating, Nanomaterials

Academic Titles / Tasks

Assistant Professor, Ondokuz Mayıs University, Mühendislik Fakültesi, Metalurji Ve Malzeme Mühendisliği Bölümü, 2024 - Continues

Research Assistant PhD, Ondokuz Mayıs University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2018 - Continues

Research Assistant, Ondokuz Mayıs University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2016 - 2018

Research Assistant, Erciyes University, Mühendislik Fakültesi, Malzeme Bilimi Ve Mühendisliği Bölümü, 2015 - 2016

Research Assistant, Ondokuz Mayıs University, Mühendislik Fakültesi, Metalurji ve Malzeme Mühendisliği Bölümü, 2014 - 2015

Courses

Taşınm Olayları, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020
Nanomaterials and Nanotechnology, Undergraduate, 2020 - 2021
Biomalzemeler ve Uygulama Alanları, Undergraduate, 2020 - 2021
Introduction to Materials Science, Undergraduate, 2020 - 2021
Biomalzemeler ve Uygulama Alanlar, Undergraduate, 2019 - 2020
Sır ve Emaye, Undergraduate, 2019 - 2020
Nanomalzemeler ve Nanoteknoloji, Undergraduate, 2018 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The Effect of Different Molar Ratios of CeO₂ on Photoluminescence Properties of CeO₂/TiO₂ Nanoparticles**
Dokan F. K., Kuru M., Torun H. Ö., Öztürk E.
Indian Journal of Pure and Applied Physics, vol.61, no.3, pp.190-197, 2023 (SCI-Expanded)
- II. **Temperature- and frequency-dependent electrical characterization with humidity properties in MZC nanoferrites**
Kuru M., Kuru T. S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.33, no.23, pp.18587-18606, 2022 (SCI-Expanded)
- III. **Structural, electrical and magnetic characterization of Al³⁺ substituted Mg-Zn ferrites**
Kuru M., KILIÇ DOKAN F., Sasmaz Kuru T.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.128, no.4, 2022 (SCI-Expanded)
- IV. **A new approach to optimize the synthesis parameters of TiO₂ microsphere and development of photocatalytic performance**
KILIÇ DOKAN F., Kuru M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.1, pp.640-655, 2021 (SCI-Expanded)
- V. **Dielectric, magnetic and humidity properties of Mg-Zn-Cr ferrites**
Kuru M., Kuru T. S., Karaca E., BAĞCI S.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.836, 2020 (SCI-Expanded)
- VI. **The effect of heat treatment temperature and Mg doping on structural and photocatalytic activity of ZnO thin films fabricated by RF magnetron co-sputtering technique**
Kuru M., Narsat H.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.20, pp.18484-18495, 2019 (SCI-Expanded)
- VII. **Structural, optical, and dielectric properties of Cu, Ni-doped Zn ferrites**
Kuru T. S., Kuru M.
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.55, no.3, pp.781-788, 2019 (SCI-Expanded)
- VIII. **The role of the calcium concentration effect on the structural and dielectric properties of mixed Ni-Zn ferrites**
Kuru M., Kuru T. S., BAĞCI S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, no.6, pp.5438-5453, 2019 (SCI-Expanded)
- IX. **Dielectric, humidity behavior and conductivity mechanism of Mn_{0.2}Ni_{0.3}Zn_{0.5}Fe₂O₄ ferrite prepared by co-precipitation method**

Kuru T. S., Kuru M., BAĞCI S.

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.29, no.20, pp.17160-17169, 2018 (SCI-Expanded)

- X. **Structural, dielectric and humidity properties of Al-Ni-Zn ferrite prepared by co-precipitation method**

Kuru T. S., Kuru M., BAĞCI S.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.753, pp.483-490, 2018 (SCI-Expanded)

- XI. **Fabrication and characterization of SmCo₅/Nb ferromagnetic/superconducting hybrid thin films grown by RF magnetron sputtering technique**

Ongun E., Kuru M., Serhatlioglu M., Hancer M., Ozmetin A. E.

VACUUM, vol.144, pp.116-124, 2017 (SCI-Expanded)

- XII. **Structural and low temperature transport properties of PbBi thin films fabricated by rapid solidification technique**

Kuru M., Ongun E., Ozmetin A. E.

MATERIALS RESEARCH EXPRESS, vol.4, no.6, 2017 (SCI-Expanded)

- XIII. **The role of heat treatment on the structural and nano-mechanical properties of SmCo₅ thin films grown by RF magnetron sputtering technique**

Kuru M., Ozmetin A., Ozmetin A., Sahin O.

Ceramics International, vol.43, no.4, pp.3893-3899, 2017 (SCI-Expanded)

- XIV. **Fabrication and mechanical characterization of rare earth permanent magnet SmCo₅ films**

Kuru M., Sahin O., Ozarslan S., Ozmetin A. E.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.694, pp.726-732, 2017 (SCI-Expanded)

- XV. **Fabrication and characterization of ferromagnetic-superconducting hybrid films grown by combined PVD techniques**

Ozmetin A., Ongun E., Kuru M., Yazici E.

Applied Surface Science, vol.350, pp.2-5, 2015 (SCI-Expanded)

- XVI. **Mechanical characterization of MgB₂ thin films using nanoindentation technique**

Ozmetin A., Sahin O., Ongun E., Kuru M.

Journal of Alloys and Compounds, vol.619, pp.262-266, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Critical assessment of a TiO₂-Ag-ZnO nanocomposite photocatalyst on improved photocatalytic activity under mixed UV-visible light**

Tjardts T., Elis M., Hicke M., Symalla F., Shondo J., Drewes J., Kuru M., Wolff N., Faupel F., Aktas C., et al.

APPLIED SURFACE SCIENCE ADVANCES, vol.18, 2023 (ESCI)

- II. **MEKANİK ALAŞIMLANMIŞ AlCuCrFeNi YÜKSEK ENTROPİLİ ALAŞIMININ FİZİKSEL BUHAR BİRİKTİRME TEKNİĞİ İLE KAPLANABİLİRLİĞİNİN İNCELENMESİ**

Şimşek Y. E., DÖLEKER K. M., KURU M., SÜNBÜL S. E., İÇİN K.

Manufacturing Technologies and Applications, no.2, pp.1-8, 2022 (Peer-Reviewed Journal)

- III. **The Effect of Thickness on Photocatalytic Performance in MgZnO Thin Films**

Kuru M.

Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.24, no.4, pp.586-595, 2020 (Peer-Reviewed Journal)

- IV. **Polydopamine Mediated Growth of Ag Nanostructures on ZnO Thin Films for Catalytic Degradation of Organic Dyes**

Kuru M., PEKDEMİR S.

GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.33, no.4, pp.857-870, 2020 (ESCI)

- V. **Fabrication and Characterization of Permanent Magnetic SmCo₅ Thin Films by SQUID Magnetometer**

KURU M., Ongun E., ÖZMETİN A., HANÇER M., ÖZMETİN A. E.

Refereed Congress / Symposium Publications in Proceedings

- I. **Fabrication of MXene, a new generation material, and investigation of its use as an air pollution sensor**
KURU M., Aslantürk M. S.
Cooperation for Climate and Green Deal Symposium, 24 October 2022
- II. **Fabrication of ZnO thin films and their application as capacitive humidity sensor**
KURU M.
2nd International Conference on Engineering and Applied Natural Sciences ICEANS2022, Turkey, 15 October 2022
- III. **The Effect of Thickness and Heat Treatment Temperature on Structural and Photocatalytic Properties in $Mg_{x}Zn_{1-x}O$ Thin Films,**
KURU M.
5nd International Conference on Material Science and Technology in Cappadocia (IMSTEC'20), 16 - 18 October 2020
- IV. **COMPOSITIONAL EFFECT ON HUMIDITY PROPERTIES OF $Mg_{0.75}Zn_{0.25}Cr_xFe_{2-x}O_4$ FERRITES**
ŞAŞMAZ KURU T., KURU M.
th International Congress on Fundamental and Applied Sciences 2020 (ICFAS2020), 6 - 08 October 2020
- V. **The Effect of Al₃ Substitution on Structural and Electrical Properties of Mg-Zn Ferrite Materials**
ŞAŞMAZ KURU T., KURU M.
3rd International Conference on Physical Chemistry Functional Materials, 22 - 24 September 2020
- VI. **Effect of CeO₂ content on photocatalytic activity of TiO₂**
KILIÇ DOKAN F., KURU M.
6th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG2019), 16 - 18 October 2019
- VII. **Fabrication of Mg-doped ZnO thin films by RF magnetron co-sputter method and investigation of photocatalytic activities**
KURU M., KILIÇ DOKAN F., narsat h.
Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018
- VIII. **Effect of Ca-doped on the structural and dielectric properties of Ni-Zn ferrites prepared by co-precipitation method**
ŞAŞMAZ T., KURU M., BAĞCI S.
Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018
- IX. **Polydopamine mediated growth of Ag nanostructures on ZnO thin films**
PEKDEMİR S., KURU M., ÖNSES M. S.
Science and Applications of Thin Films, Conference Exhibition (SATF 2018), İzmir, Turkey, 17 - 21 September 2018
- X. **THE ROLE OF ANNEALING TEMPERATURE ON PHOTOCATALYTIC PROPERTIES OF ZNO THIN FILMS FABRICATED BY RF MAGNETRON SPUTTERING TECHNIQUE**
Narsat H., KURU M., KILIÇ DOKAN F.
Science and Applications of Thin Films, Conference Exhibition (SATF 2018), Nevşehir, Turkey, 17 - 19 September 2018
- XI. **Fabrication and characterization of permanent magnetic $smCo_5$ thin films by squid magnetometer**
Kuru M., Ongun E., Özmetin A., Hançer M., Özmetin A. E.
10th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting, Multifunctional and Nano Materials, JAPMED'10 2017, İzmir, Turkey, 4 - 08 July 2017, vol.915, pp.16-21
- XII. **Effect of Au Concentration on Degradation of Methylene Blue using Au/TiO₂ Catalyst**
KURU M., veziroğlu s., PEKDEMİR S., Ghorı M. Z., Aktaş C., Faupel F.
13th Nanoscience Nanotechnology Conference, Antalya, Turkey, 22 - 25 October 2017
- XIII. **Structural and optical properties of Cu and Ni doped Zn ferrites with comparing each other**

ŞAŞMAZ T., KURU M.

2. International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Nevşehir, Turkey, 11 - 13 October 2017

XIV. Fabrication and Mechanical Characterization of SmCo films for Application in Superconductor Ferromagnet Hybrid Structures

KURU M., ÖZARSLAN S., ŞAHİN O., ÖZMETİN A. E.

NANOSMAT-Asia Conference, 24 - 27 March 2015

XV. Fabrication and Characterization of MgB₂ Films Grown by RF Magnetron Sputtering Technique

ongun e., KURU M., YAZICI E., ÖZMETİN A. E., ŞAHİN O.

Science and Applications of Thin Films, Conference Exhibition (SATF 2014), 15 - 19 September 2014

XVI. Fabrication and Characterization of Ferromagnetic Superconducting Hybrid Films

ongun e., KURU M., YAZICI E., ÖZMETİN A. E.

Science and Applications of Thin Films, Conference Exhibition (SATF 2014), 15 - 19 September 2014

XVII. Fabrication and Low Temperature Magnetic Characterization of NdFeB films for Application in Superconductor Ferromagnet Hybrid Structures

KURU M., ongun e., Usman S., ÖZMETİN A. E.

International Conference on Superconductivity and Magnetism, 27 April - 02 May 2014

XVIII. FABRICATION AND CHARACTERIZATION OF MgB₂ FILMS DEPOSITED BY SINGLE TARGET MAGNETRON SPUTTERING

ongun e., KURU M., ÖZMETİN A. E.

International Conference on Superconductivity and Magnetism, 27 April - 02 May 2014

XIX. Fabrication and Low Temperature Characterisation of Nd Fe B thin films by LT SHPM Magnetometry

KURU M., ongun e., ÖZMETİN A. E.

International Conference on Nanoscale Magnetism (ICNM2013), 2 - 06 September 2013

Supported Projects

Kuru M., Project Supported by Higher Education Institutions, Yeni nesil bir malzeme olan MXene'in üretilmesi ve hava kirliliği sensörü olarak kullanımının araştırılması, 2022 - Continues

Kuru M., Project Supported by Higher Education Institutions, Sol-Jel tekniği destekli Termal Bariyer Kaplama Sistemi, 2022 - Continues

Kuru M., Project Supported by Higher Education Institutions, Heteroyapılı giyilebilir sensörlerin üretilmesi ve Karbonmonoksit (CO) gaz sensörü olarak kullanımının araştırılması, 2022 - Continues

Project Supported by Higher Education Institutions, Nanoparçacık (Au, Ag) dekore edilmiş ZnO ince film sensörlerin üretilmesi ve nem algılama hassasiyetinin araştırılması, 2021 - Continues

Kuru M., Project Supported by Higher Education Institutions, Metalurji ve Malzeme Mühendisliği Bölümünün Lisans laboratuvarlarının öğrenim altyapısının geliştirilmesi, 2020 - 2021

Kuru M., İnanç İ., Project Supported by Higher Education Institutions, Malzeme Bilimi ve Mühendisliği Laboratuvarlarının İyileştirilmesi, 2019 - 2020

Kuru M., Eşzamanlı Magnetron Saçtırma (Co-Sputter) Metodu İle Mg_xZn_{1-x}O İnce Filmlerin Üretimi Ve Fotokatalitik Aktivitelerinin İncelenmesi, 2018 - 2019

Industrial Thesis Project, Titreşen Örnek Miknatıslanma Ölçme Sistemi Geliştirilmesi, 2012 - 2014

TUBITAK Project, Geçiş metali karbürlerin ve 001 yüzeylerinin elektronik titreşim ve elektron fonon etkileşimi özelliklerinin yoğunluk fonksiyon teorisi ile araştırılması, 2009 - 2012