

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAK-5505-2020

ScopusID: 35208380800

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Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), Turkey 2009 - 2016

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), Turkey 2006 - 2009

Undergraduate, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 2002 - 2006

Certificates, Courses and Trainings

IT, Web Tasarımı Uygulamaları Eğitim Programı (Sanal Sınıf Ortamında), Ankara Üniversitesi, 2021

Vocational Training, Semiconductor Physics, University of Colorado Boulder, 2020

Dissertations

Doctorate, Püskürtme yöntemiyle büyütülen katkılı SnO₂/Si heteroeklemlerin incelenmesi, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (Dr), 2015

Postgraduate, Antimon katkılı kalay oksit/bakır oksit/metal diyotların elektriksel ve optiksel özelliklerinin incelenmesi, Ankara University, Fen Bilimleri Enstitüsü, Fizik Mühendisliği (YI) (Tezli), 2009

Research Areas

Materials Science, Structure of Liquids and Solids; Crystallography, Surfaces, Interfaces, Thin Films and Nanosystems, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Magnetic Properties and Materials, Optical Properties, Spectroscopy of Matter

Academic Titles / Tasks

Research Assistant, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2009 - Continues

Courses

PHYSICS II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

PHYSICS II, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020

PHYSICS I, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
 PHYSICS I, Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020
 Semiconductor Physics I, Undergraduate, 2022 - 2023, 2021 - 2022
 NANOTECHNOLOGY; PAST, PRESENT AND FUTURE, Undergraduate, 2021 - 2022
 PHYSICS I, Undergraduate, 2020 - 2021
 PHYSICS I, Undergraduate, 2020 - 2021
 PHYSICS I, Undergraduate, 2020 - 2021
 FZM 357 ELEKTRONİK I LABORATUVARI, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011
 FZM 356 KUANTUM FİZİĞİ LABORATUVARI, Undergraduate, 2017 - 2018, 2014 - 2015, 2010 - 2011, 2009 - 2010
 PHYSICS I, Undergraduate, 2017 - 2018
 FZM 358 ELEKTRONİK LABORATUVARI II, Undergraduate, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010
 FZM 111 (Zootekni Bölümü) Fizik I, Undergraduate, 2017 - 2018
 AQS 107 (Programme of Fisheries and Aquaculture) PHYSICS, Undergraduate, 2017 - 2018
 PHYSICS I, Undergraduate, 2017 - 2018
 PHY 158 (JM) General Physics Laboratory, Undergraduate, 2016 - 2017
 FZM 106 FİZİK II UYGULAMA, Undergraduate, 2016 - 2017, 2015 - 2016, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011
 PHY 202 Mathematical Methods in Physics Engineering II Application, Undergraduate, 2016 - 2017
 FZM 105 FİZİK I UYGULAMA, Undergraduate, 2016 - 2017, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011
 FZM 158 (JM) Fizik I Laboratuvarı, Undergraduate, 2016 - 2017, 2009 - 2010
 PHY 152 GENEL FİZİK LABORATUVARI (BİLG. MÜH. BÖL.), Undergraduate, 2015 - 2016
 FZM 152 GENEL FİZİK LABORATUVARI (KİMYA MÜH. BÖL.), Undergraduate, 2015 - 2016
 FZM 111 (JM) Fizik I Uygulama, Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013
 FZM 112 (JM) Fizik II Uygulama, Undergraduate, 2013 - 2014, 2012 - 2013
 PHY 111 (GM) Physics I Uygulama, Undergraduate, 2012 - 2013, 2011 - 2012
 FZM 122 (BM,GM,KM) Fizik II Uygulama, Undergraduate, 2011 - 2012
 FZM 254 Fizik IV Laboratuvarı, Undergraduate, 2011 - 2012
 FZM 113 Fizik I Uygulama (Tarla Bitkileri Bölümü) , Undergraduate, 2010 - 2011
 FZM 113 Fizik I Uygulama (Bahçe Bitkileri Bölümü), Undergraduate, 2010 - 2011
 FZM 155 Fizik 1 Laboratuvarı, Undergraduate, 2009 - 2010
 FZM 155 (EM) Fizik I Laboratuvarı, Undergraduate, 2009 - 2010
 FZM 156 Fizik II Laboratuvarı, Undergraduate, 2009 - 2010
 FZM 156 (EM) Fizik II Laboratuvarı, Undergraduate, 2009 - 2010

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of Co doping on optical parameters of SnO₂ thin films**
 GÜRAKAR S., Serin T.
 OPTICAL MATERIALS, vol.111, 2021 (SCI-Expanded)
- II. **Variation of structural and optical properties of TiO₂ films prepared by DC magnetron sputtering method with annealing temperature**
 GÜRAKAR S., Ot H., Horzum S., Serin T.
 MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.262, 2020 (SCI-Expanded)
- III. **Comprehensive structural analysis and electrical properties of (Cu, Al and In)-doped SnO₂ thin films**
 GÜRAKAR S., Serin T.
 MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.251, 2019 (SCI-Expanded)

- IV. **Investigation of the structural and optical properties of copper-titanium oxide thin films produced by changing the amount of copper**
Horzum S., GÜRAKAR S., Serin T.
THIN SOLID FILMS, vol.685, pp.293-298, 2019 (SCI-Expanded)
- V. **High quality optoelectronic properties of Sb-doped SnO₂ by spray pyrolysis with less solution**
GÜRAKAR S., Serin T.
MATERIALS RESEARCH EXPRESS, vol.6, no.8, 2019 (SCI-Expanded)
- VI. **Studies on optical properties of antimony doped SnO₂ films**
GÜRAKAR S., Serin T., Serin N.
APPLIED SURFACE SCIENCE, vol.352, pp.16-22, 2015 (SCI-Expanded)
- VII. **Influence of oxygen flow rate in CuO**
Serin T., GÜRAKAR S., Ot H., YILDIZ A., Serin N.
APPLIED SURFACE SCIENCE, vol.352, pp.155-157, 2015 (SCI-Expanded)
- VIII. **Current flow mechanism in Cu₂O/p-Si heterojunction prepared by chemical method**
Serin T., Guerakar S., Serin N., Yildirim N., Kus F. O.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.42, no.22, 2009 (SCI-Expanded)

Articles Published in Other Journals

- I. **Comparative structure, optical and electrical characteristics of sol-gel-deposited In-, Ga-, and Sn-doped CuO thin films**
Dogru N., GÜRAKAR S., Serin T., YILDIZ A.
Materialia, vol.32, 2023 (ESCI)
- II. **Electrical and microstructural properties of (Cu, Al, In)-doped SnO₂ films deposited by spray pyrolysis**
GÜRAKAR S., Serin T., Serin N.
Advanced Materials Letters, vol.5, no.6, pp.309-314, 2014 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **Structural & Surface Properties of Low Cu Doped ZnO Thin Films**
GÜRAKAR S.
9th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG-2022), Ankara, Turkey, 22 September 2022
- II. **Optical Properties of Sb Doped ZnO Thin Films**
GÜRAKAR S.
Turkish Physical Society (TPS) 38th International Physics Congress, Bodrum, Turkey, 31 August 2022
- III. **Effect of Deposition Temperature on Structural & Optical Properties of ZnO Thin Films**
GÜRAKAR S.
6. International Conference on Material Science and Technology in Cappadocia (IMSTEC 2021), Nevşehir, Turkey, 26 - 28 November 2021
- IV. **Effect of varying Cu content on structural and surface properties of Co&Cu co-doped ZnO thin films**
GÜRAKAR S.
13th International Conference on Physics of Advanced Materials (ICPAM-13), Costa Brava, Spain, 24 - 30 September 2021
- V. **Effect of Al Doping Ratio on Structural & Optical Properties of ZnO Thin Films**
GÜRAKAR S.
4th International Conference on Life and Engineering Sciences (ICOLES 2021), İstanbul, Turkey, 23 - 25 September

2021

- VI. **Structural Analysis of ZnO Thin Films**
GÜRAKAR S., SERİN S. T.
5. International Conference on Materials Science and Technology in Cappadocia (IMSTEC'20), Nevşehir, Turkey, 16 - 18 October 2020
- VII. **Sb-Doped SnO₂ Thin Films Grown by Spray Method: Effect of The HCl Content in The Spraying Solution on Optical Properties**
GÜRAKAR S., SERİN S. T.
3. International Conference on Materials Science, Mechanical and Automotive Engineerings and Technology in Turkey (IMSMATEC'20), Turkey, 24 - 26 June 2020
- VIII. **Investigation of the effect of annealing temperature on TiO₂ film properties**
GÜRAKAR S., OT H., SEYDA H., SERİN S. T.
3rd International Conference on Applied Surface Science (ICASS2019), Pisa, Italy, 17 - 20 June 2019
- IX. **Optical Properties of Co-Doped SnO₂ Thin Films from Reflectance Spectra**
GÜRAKAR S., SERİN S. T.
European Materials Research Society 2019 Spring Meeting - IUMRS - ICAM International Conference on Advanced Materials (E-MRS Spring Meeting 2019), Nice, France, 27 - 31 May 2019
- X. **X-Ray Analysis of In-Doped SnO₂ Thin Films by Williamson-Hall Method**
GÜRAKAR S., SERİN S. T.
7th internationalconference on advanced tehnologies, Antalya, Turkey, 28 April - 01 May 2018
- XI. **Optical Properties of Co-Doped SnO₂ Thin Films Using A Simple Analysis Method**
GÜRAKAR S., SERİN S. T.
7th International Conference on Advanced Technologies (ICAT'18), Antalya, Turkey, 28 April - 01 May 2018
- XII. **Optical and Electrical Properties of Doped ZnO Thin Films**
GÜRAKAR S., BULDUK E., SERİN S. T.
The International Conference on Materials Science, Mechanical and Automation Engineerings and Technology in Çeşme/İZMİR (IMSMATEC'xx18), İzmir, Turkey, 10 - 12 April 2018
- XIII. **Structural and Optical Properties of Cu Doped ZnO Thin Films**
GÜRAKAR S., GÜNDÜZ Z., SERİN S. T.
The International Conference on Materials Science, Mechanical and Automation Engineerings and Technology in Çeşme/İZMİR (IMSMATEC'xx18), İzmir, Turkey, 10 - 12 April 2018
- XIV. **A Detailed Study on Thickness Calculation of (Cu, Al, In)-Doped SnO₂ Thin Films Using A Simple Analysis Method**
GÜRAKAR S., SERİN S. T.
2. International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Turkey, 11 - 13 October 2017
- XV. **Optical Properties of (Cu, Al, In)-Doped SnO₂ Thin Films Grown by Spray Method.**
GÜRAKAR S., SERİN S. T.
2. International Conference on Material Science and Technology in Cappadocia (IMSTEC 2017), Kapadokya, Turkey, 11 - 13 October 2017
- XVI. **A Detailed Study on Thickness Calculation of In-Doped SnO₂ Thin Films Using A Simple Analysis Method.**
GÜRAKAR S., SERİN S. T.
International Congress on Semiconductor Materials Devices (ICSMD 2017), 17-19 August 2017, 17 - 01 August 2017
- XVII. **Optical Properties of Indium Doped SnO₂ Thin Films.**
GÜRAKAR S., SERİN S. T.
International Congress on Semiconductor Materials Devices (ICSMD 2017), Konya, Turkey, 17 - 19 August 2017
- XVIII. **The Effect of Various Doping Atoms on Some Physical Properties of SnO₂ Thin Films**
GÜRAKAR S., SERİN S. T.
NaNoNG 2016, Antalya, Turkey, 20 - 22 October 2016

- XIX. **Effects of Co and Cu dopants on the structural optical and electrical properties of ZnO nanocrystals**
YILDIZ A., UZUN Ş., GÜRAKAR S., kara i., SERİN N., SERİN S. T.
NaNoNG2015, Antalya, Turkey, 29 - 31 October 2015
- XX. **The Effect of Oxygen Flow Rate on the Electrical Properties of CuO Films Coated By DC Magnetron Sputtering Technique**
SERİN S. T., GÜRAKAR S., YILDIZ A., SERİN N.
International Conference on Physics of Advanced Materials(ICPAM-10), Iasi, Romania, 22 - 28 September 2014
- XXI. **Studies on optical properties of antimony doped SnO₂ films**
GÜRAKAR S., SERİN S. T., SERİN N.
International Conference on Physics of Advanced Materials(ICPAM-10), Iasi, Romania, 22 - 28 September 2014
- XXII. **Optical Properties of Undoped and Antimony Doped SnO₂ Films**
GÜRAKAR S., SERİN S. T., SERİN N.
HUMBOLDT KOLLEG: GERMAN- TURKISH COOPERATION IN PHYSICS : NEW CHALLENGES IN SCIENCE, Ankara, Turkey, 11 - 13 June 2014
- XXIII. **ELECTRICAL AND MICROSTRUCTURAL PROPERTIES OF CU AL IN DOPED SnO₂ FILMS DEPOSITED BY SPRAY PYROLYSIS**
GÜRAKAR S., SERİN S. T., SERİN N.
Advanced Materials World Congress 2013, İzmir, Turkey, 16 - 19 September 2013
- XXIV. **Kimyasal Yöntemle Büyütülen Bakır Oksit İnce Filmlerin Yapısal Optiksel Ve Elektriksel Özelliklerinin İncelenmesi**
GÜRAKAR S., SERİN S. T., SERİN N.
17. Yoğun Madde Fiziği Ankara, Ankara, Turkey, 05 November 2010
- XXV. **PÜSKÜRTME YÖNTEMİ İLE BÜYÜTÜLEN KATKISIZ VE ANTIMON KATKILI KALAY OKSİT İNCE FİLMLERİN İNCELENMESİ**
GÜRAKAR S., SERİN S. T., SERİN N.
TURKISH PHYSICAL SOCIETY 27TH INTERNATIONAL PHYSICS CONGRESS, İstanbul, Turkey, 14 - 17 September 2010

Scientific Refereeing

MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, August 2023
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, July 2023
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, July 2023
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, June 2023
SILICON, Journal Indexed in SCI-E, June 2023
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, June 2023
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, May 2023
SILICON, Journal Indexed in SCI-E, May 2023
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, Journal Indexed in SCI-E, November 2022
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, October 2022
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, Journal Indexed in SCI-E, September 2022
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, August 2022
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, January 2021
MATERIALS TODAY COMMUNICATIONS, Journal Indexed in SCI-E, November 2020
MATERIALS SCIENCE & ENGINEERING B: SOLID-STATE MATERIALS FOR ADVANCED TECHNOLOGY, SCI Journal, December 2018
MICROSYSTEM TECHNOLOGIES, Journal Indexed in SCI-E, April 2015

Tasks In Event Organizations

Adıgüzel A., Süsoy Doğan G., Yılmaz Alan H., Aydoğu H. S., Aksu Canbay C., Çetinkaya H., Çilli A., Güdekli E., Gürakar S., Güzelçimen F., et al., Turkish Physical Society (TPS) 38th International Physics Congress, Scientific Congress, Muğla, Turkey, Eylül 2022

Metrics

Publication: 35

Citation (WoS): 112

Citation (Scopus): 139

H-Index (WoS): 6

H-Index (Scopus): 6