

Res. Asst. PINAR ORUÇ

Personal Information

Office Phone: [+90 312 202 1523](tel:+903122021523)

Email: pinaroruc@gazi.edu.tr

Web: <https://avesis.gazi.edu.tr/12936>

International Researcher IDs

ScholarID: f4ENzn8AAAAJ

ORCID: 0000-0002-5837-7412

Publons / Web Of Science ResearcherID: AAQ-3174-2021

ScopusID: 57219865183

Yoksis Researcher ID: 302139

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2020 - Continues

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2018 - 2020

Undergraduate, Ankara University, Fen Fakültesi, Fizik Bölümü, Turkey 2011 - 2017

Dissertations

Postgraduate, İki Boyutlu Topolojik Yalıtkanlarda Elektron-Fonon Etkileşmesi, Ankara University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2020

Research Areas

Mathematical Methods in Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties

Academic Titles / Tasks

Research Assistant, Gazi University, Fen Fakültesi, Fizik, 2019 - Continues

Courses

Fizik Laboratuvarı (Mühendislik Fakültesi), Undergraduate, 2023 - 2024, 2022 - 2023, 2019 - 2020

Fizik Laboratuvarı III (Dalgalar ve Optik), Undergraduate, 2023 - 2024, 2021 - 2022, 2020 - 2021, 2019 - 2020

Fizik Laboratuvarı V (Kuantum Fiziği), Undergraduate, 2023 - 2024, 2020 - 2021, 2019 - 2020

Fizik II (Uygulama), Undergraduate, 2023 - 2024, 2022 - 2023

Fizik I (Uygulama), Undergraduate, 2023 - 2024, 2022 - 2023

Fizik Laboratuvarı IV (Elektronik), Undergraduate, 2023 - 2024

Fizik Laboratuvarı (Teknoloji Fakültesi), Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021

Physics Laboratory I (Mechanics), Undergraduate, 2022 - 2023, 2018 - 2019

Temel Fizik Laboratuvarı (Biyoloji Bölümü), Undergraduate, 2023 - 2024, 2022 - 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Impact of voltage and frequency on electrical characteristics of MIS capacitors with triphenylamine layer**
Izmirli S., ÇAVDAR Ş., ORUÇ P., Eymur S., TUĞLUOĞLU N.
PHYSICA B-CONDENSED MATTER, vol.696, 2025 (SCI-Expanded)
- II. **Frequency-dependent capacitance and conductance characteristics and current transport mechanisms of Schottky diodes with TPA-IFA organic interfacial layer**
Çavdar Ş., Oruç P., Eymur S., Tuğluoğlu N.
PHYSICA SCRIPTA, vol.99, no.9, pp.1-17, 2024 (SCI-Expanded)
- III. **Photosensitive properties of Schottky type photodiodes prepared by spin coating of isoniazid Schiff base thin film on p-Si**
Tezcan A. O., Oruç P., Tuğluoğlu N., Eymur S.
OPTICAL AND QUANTUM ELECTRONICS, vol.56, no.989, pp.1-20, 2024 (SCI-Expanded)
- IV. **Investigation of photosensitive and photodetector characteristics of n-TPA-IFA/p-Si heterojunction structure**
Çavdar Ş., Oruç P., Eymur S., Tuğluoğlu N.
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, vol.35, no.1022, pp.1-19, 2024 (SCI-Expanded)
- V. **Investigation of illumination-dependent electrical and photodiode properties and conduction mechanism of the Al/p-Si contact with Schiff base compound (Pyr-Pic) interlayer**
Oruç P., Tezcan A. O., Eymur S., Tuğluoğlu N.
PHYSICA SCRIPTA, vol.99, no.055906, pp.1-16, 2024 (SCI-Expanded)
- VI. **Investigation of Terp-Pyr/p-Si diode using complex impedance spectroscopy depending on measurement temperatures and frequencies**
Oruç P., Tuğluoğlu N., Eymur S.
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, vol.35, no.314, pp.1-13, 2024 (SCI-Expanded)
- VII. **Investigation of dielectric properties of amorphous, anatase, and rutile TiO₂ structures**
Oruç P., Turan N., Çavdar Ş., Koralay H., Tuğluoğlu N.
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, vol.34, no.498, pp.1-13, 2023 (SCI-Expanded)
- VIII. **Investigation of temperature dependent electrical and impedance characteristics of bulk Zn_{0.95}Co_{0.05}O**
Turan N., Oruç P., Demiroolmez Y., Seckin A., Çağırtekin A. O., Çavdar Ş., Koralay H., Tuğluoğlu N.
JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol.100, no.1, pp.147-159, 2021 (SCI-Expanded)
- IX. **AC conductivity, dielectric and electrical modulus studies of bulk Zn_{0.95}Co_{0.05}O ceramic**
Oruç P., Turan N., Demiroolmez Y., Seckin A., Çavdar Ş., Koralay H., Tuğluoğlu N.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.12, pp.15837-15850, 2021 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **INVESTIGATION OF DIELECTRIC PARAMETERS OF ZnO/p-Si DIODE AT ROOM TEMPERATURE**
Çağırtekin A. O., Ajjaq A., Barin Ö., Oruç P., Acar S.
87 Annual Meeting of DPG and DPG Spring Meeting of the Condensed Matter Section (SKM) 2024, Berlin, Germany, 17 - 22 March 2024
- II. **Investigation of Electrical Properties of Metal Oxide Semiconductors Thinfilms**
Oruç P., Çağırtekin A. O., Çavdar Ş., Tuğluoğlu N., Koralay H.

87th Annual Meeting of DPG and DPG-Frühjahrstagung (DPG Spring Meeting) of the Condensed Matter Section (SKM, Berlin, Germany, 17 - 22 March 2024, pp.1

III. Investigation of frequency dependent electrical properties of multilayer metal oxide structures

ORUÇ P., SEÇKİN A., KORALAY H.

Turkish Physical Society 39th International Physics Congress, Muğla, Turkey, 31 August 2023

IV. Investigation of voltage dependent electrical properties of layered metal oxide structure

SEÇKİN A., ORUÇ P., KORALAY H.

Turkish Physical Society 39th International Physics Congress, Muğla, Turkey, 31 August 2023

Supported Projects

Koralay H., Oruç P., Project Supported by Higher Education Institutions, Polimer/Metal Oksit Çok Katmanlı Yapıların Aygıt Karakterizasyonu, 2022 - 2024

ÇAVDAR Ş., TUĞLUOĞLU N., ORUÇ P., EYMÜR S., Project Supported by Higher Education Institutions, TPA-DA-IFA:ZnCo₂O₄ Hibrit Arayüzey Katmanlı Aygıt Üretimi ve Karakterizasyonu, 2022 - 2024

Kandemir B. S., TUBITAK Project, Substrates-induced effects on topological superconductivity and the formation of Majorana Fermions, 2021 - 2024

Kandemir B. S., TUBITAK Project, From Graphene to Topological Insulators-Dirac Materials: Electron-phonon interactions, Dichroism and analog gravity, 2016 - 2019

Metrics

Publication: 13

Citation (WoS): 19

Citation (Scopus): 20

H-Index (WoS): 3

H-Index (Scopus): 3

Scholarships

ARDEP, TUBITAK, 2021 - Continues

ARDEP, TUBITAK, 2018 - 2019

Non Academic Experience

Institut de Ciència Molecular - ICMOL (University of Valencia)