

Res. Asst. MURAT ULUSOY

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAR-3864-2021

ScopusID: 57223197114

Yoksis Researcher ID: 319167

Education Information

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 2018 - 2021

Undergraduate, Gazi University, Fen Fakültesi, Fizik, Turkey 2007 - 2011

Undergraduate, Ataturk University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2005 - 2007

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Education Management and Planning, Fizik Öğretmenliği Formasyon Eğitimi, Karadeniz Teknik Üniversitesi, 2011

Dissertations

Postgraduate, Investigation of Electrical Properties of Au/(NiS:PVP)/n-Si (MPS) Structure in Wide Range Frequency, Gazi University, Fen Bilimleri Enstitüsü, 2021

Research Areas

Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties

Academic Titles / Tasks

Research Assistant, Gazi University, Fen Fakültesi, Fizik, 2020 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Evaluation of the current transport mechanism depending on the temperature of Schottky structures with Ti:DLC interlayer
ERBİLEN TANRIKULU E., Berkün Ö., ULUSOY M., Avar B., Durmuş H., ALTINDAL Ş.
Materials Today Communications, vol.38, 2024 (SCI-Expanded)
- II. Investigation of the interface state characteristics of the Al/Al₂O₃/Ge/p-Si heterostructure over a wide frequency range by capacitance and conductance measurements
Akin B., ULUSOY M., ALTINDAL YERİŞKİN S.
Materials Science in Semiconductor Processing, vol.170, 2024 (SCI-Expanded)
- III. Frequency-dependent physical parameters, the voltage-dependent profile of surface traps, and their lifetime of Au/(ZnCdS-GO:PVP)/n-Si structures by using the conductance method
Güçlü Ç., Tanrikulu E. E., ULUSOY M., Kalandargh Y. A., ALTINDAL Ş.
Journal of Materials Science: Materials in Electronics, vol.35, no.5, 2024 (SCI-Expanded)
- IV. The photoresponse behavior of a Schottky structure with a transition metal oxide-doped organic polymer (RuO₂:PVC) interface
Elamen H., Badali Y., ULUSOY M., AZIZIAN-KALANDARAGH Y., ALTINDAL Ş., Güneşer M. T.
Polymer Bulletin, vol.81, no.1, pp.403-422, 2024 (SCI-Expanded)
- V. Electrical and Photodetector Characteristics of Schottky Structures Interlaid with P(EHA) and P(EHA-co-AA) Functional Polymers by the iCVD Method
Demirezen S., Ulusoy M., Durmuş H., Cavusoglu H., Yilmaz K., Altindal Ş.
ACS OMEGA, vol.8, no.49, pp.46499-46512, 2023 (SCI-Expanded)
- VI. Dielectric properties of MS diodes with Ag:ZnO doped PVP interfacial layer depending on voltage and frequency
Altindal Yerışkin S., ERBİLEN TANRIKULU E., ULUSOY M.
Materials Chemistry and Physics, vol.303, 2023 (SCI-Expanded)
- VII. Effect of Gadolinium on Electrical Properties of Polyethyleneimine Functionalized and Nitrogen-Doped Graphene Quantum Dot Nanocomposite Based Diode
Orhan E., Anter A., Ulusoy M., Polat B., Okuyucu C., Yıldız M., Altindal Ş.
ADVANCED ELECTRONIC MATERIALS, vol.1, no.1, pp.1-12, 2023 (SCI-Expanded)
- VIII. On frequency and voltage dependent physical characteristics and interface states characterization of the metal semiconductor (MS) structures with (Ti:DLC) interlayer
Berkün Ö., Ulusoy M., Altindal Ş., Avar B.
PHYSICA B: CONDENSED MATTER, vol.666, pp.415099, 2023 (SCI-Expanded)
- IX. The investigation of frequency dependent dielectric properties and ac conductivity by impedance spectroscopy in the Al/(Cu-doped Diamond Like Carbon)/Au structures
Feizollahi Vahid A., Alptekin S., Basman N., ULUSOY M., ŞAFAK ASAR Y., ALTINDAL Ş.
Journal of Materials Science: Materials in Electronics, vol.34, no.13, 2023 (SCI-Expanded)
- X. Negative Capacitance Behavior at Low Frequencies of Nitrogen-Doped Polyethyleneimine-Functionalized Graphene Quantum Dots-Based Structure
Berktaş Z., Orhan E., Ulusoy M., Yıldız M., Altindal Ş.
ACS Applied Electronic Materials, vol.5, no.3, pp.1804-1811, 2023 (SCI-Expanded)
- XI. The capacitance/conductance and surface state intensity characteristics of the Schottky structures with ruthenium dioxide-doped organic polymer interface
Ulusoy M., Badali Y., Pirgholi-Givi G., Azizian-Kalandaragh Y., Altindal Ş.
SYNTHETIC METALS, vol.292, pp.117243, 2023 (SCI-Expanded)
- XII. Temperature dependence of electrical characteristics and interface state densities of Au/n-type Si structures with SnS doped PVC interface
Karataş Ş., Altindal Ş., Ulusoy M., Azizian-Kalandaragh Y., Özçelik S.
Physica Scripta, vol.97, no.9, 2022 (SCI-Expanded)
- XIII. The electrical characteristic of an MIS structure with biocompatible minerals doped (Brushite+Monetite: PVC) interface layer

- Uluslararası M., Altindal Ş., Azizian-Kalandaragh Y., Özçelik S., Mirzaei-Kalar Z.
Microelectronic Engineering, vol.258, 2022 (SCI-Expanded)
- XIV. **The illumination effects on the current conduction mechanisms of the Au/(Er203:PVC)/n-Si (MPS) Schottky diodes**
Altindal Ş., Azizian-Kalandaragh Y., Ulusoy M., Pirgholi-Givi G.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.139, no.25, pp.1-12, 2022 (SCI-Expanded)
- XV. **Comparison of the electrical and impedance properties of Au/(ZnOMn:PVP)/n-Si (MPS) type Schottky-diodes (SDs) before and after gamma-irradiation**
ALTINDAL Ş., Barkhordari A., Pirgholi-Givi G., ULUSOY M., Mashayekhi H., ÖZÇELİK S., AZIZIAN-KALANDARAGH Y. PHYSICA SCRIPTA, vol.96, no.12, 2021 (SCI-Expanded)
- XVI. **On the frequency-dependent complex-dielectric, complex-electric modulus and conductivity in Au/(NiS:PVP)/n-Si structures**
ALTINDAL Ş., ULUSOY M., ÖZÇELİK S., AZIZIAN-KALANDARAGH Y.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.15, pp.20071-20081, 2021 (SCI-Expanded)
- XVII. **Frequency and voltage-dependent electrical parameters, interface traps, and series resistance profile of Au/(NiS:PVP)/n-Si structures**
Uluslararası M., Altindal Ş., Durmus P., Ozcelik S., Azizian-Kalandaragh Y.
Journal of Materials Science: Materials in Electronics, vol.32, no.10, pp.13693-13707, 2021 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **A COMPARISON ELECTRICAL PARAMETERS AND ENERGY DEPENDENT PROFILE OF SURFACE STATES OF Au/n-Si STRUCTURE WITH PVA AND (CdTe: PVA) INTERLAYER USING CURRENT-VOLTAGE (I-V) AND CAPACITANCE-VOLTAGE (C-V) MEASUREMENTS**
Güçlü Ç. Ş., Ulusoy M.
3rd International Natural Science, Engineering and Material Technologies Conference, Gazimagusa, Cyprus (Kktc), 21 September 2023, pp.26
- II. **ORGANİK ARAYÜZEY TABAKALI METAL-YARIİLETKEN YAPILARIN ELEKTRİKSEL ÖZELLİKLERİNİN BETA RADYASYONUNA BAĞLI İNCELENMESİ**
Abay Ö., Ulusoy M., Uyar E., Altindal Ş., Bilge Ocak S.
8. ULUSLARARASI MÜHENDİSLİK VE TEKNOLOJİ YÖNETİMİ KONGRESİ, İstanbul, Turkey, 08 December 2022, pp.134-138
- III. **Illumination effects on the capacitance/conductance-voltage characteristics of Au/(PVC:Er203)/n-Si (MPS) type structure for 0.5 MHz at room temperature**
Uluslararası M., Altindal Ş.
2nd International Conference on Light and Light-based Technologies (ICLLT) 2021, Ankara, Turkey, 26 - 28 May 2021, pp.73

Supported Projects

ALTINDAL Ş., ULUSOY M., Project Supported by Higher Education Institutions, Metal Nanokompozit Polimer Yarıiletken Aygitların Yapımı ve Elektriksel Ölçümlerinin İşığa ve Frekansa Bağlı Ölçülmesi, 2024 - Continues

Tasks In Event Organizations

Altındal Ş., Çiftci Y., Şahingöz R., Şafak Asar Y., Çetinkaya H. G., Altındal Yerişkin S., Özdemir E. G., Bucurgat M., Erbilen Tanrıkuşlu E., Ulusoy M., et al., 9th International Conference on Materials Science and Nanotechnology for Next Generation (MSNG-2022), Scientific Congress, Ankara, Turkey, Eylül 2022

Metrics

Publication: 20

Citation (WoS): 152

Citation (Scopus): 184

H-Index (WoS): 8

H-Index (Scopus): 10