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International Researcher IDs

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Publons / Web Of Science ResearcherID: R-1778-2018

Yoksis Researcher ID: 158062

Education Information

Doctorate, Van Yüzüncü Yil University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2009 - 2015

Postgraduate, Van Yüzüncü Yil University, Fizik, Turkey 1996 - 1999

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, TEMİZ HAVA ORTAMINA MARUZ BIRAKILMIŞ n-Si VE n-GaP YARI İLETKENLERDEN ÜRETİLMİŞ SCHOTTKY DİYOTLARIN KARAKTERİSTİKLERİNE ARAYÜZEY OKSİT TABAKA KALINLIĞININ ETKİSİ, Van Yüzüncü Yil University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2015

Postgraduate, ÖLÇÜYE GÖRE KUANTLANMANIN ELEKTRON GAZININ BAZI TERMODİNAMİK ÖZELLİKLERİNE ETKİSİ, Van Yüzüncü Yil University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 1999

Research Areas

Physics

Academic Titles / Tasks

Associate Professor, Van Yüzüncü Yil University, Fen Fakültesi, Fizik Bölümü, 2005 - Continues

Courses

Termoelektrik I, Postgraduate, 2021 - 2022

Sensors' Physics I, Postgraduate, 2019 - 2020
Genel Fizik II, Undergraduate, 2017 - 2018
Genel Fizik I, Associate Degree, 2018 - 2019
Kathal Elektronik I, Postgraduate, 2018 - 2019
Genel Fizik I, Undergraduate, 2018 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **A NEW APPROXIMATION: FROM BARRIER LOWERING TO INTERFACE STATE DENSITY**
Korkut A.
Surface Review And Letters, vol.28, no.12, pp.21501251-21501252, 2021 (SCI-Expanded)
- II. **Interface controlling study of silicon based Schottky diode by organic layer**
İmer A. G., Korkut A., Farooq W. A., Dere A., Atif M., Hanif A., Karabulut A.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.30, pp.19239-19246, 2019 (SCI-Expanded)
- III. **New serial resistance equations: Derivated from Cheungs' functions for the forward and reverse bias I**
Korkut A.
MICROELECTRONIC ENGINEERING, vol.197, pp.45-52, 2018 (SCI-Expanded)
- IV. **DIFFERENTIAL DEPLETION CAPACITANCE APPROXIMATION ANALYSIS UNDER DC VOLTAGE FOR AIR-EXPOSED Cu/n-Si SCHOTTKY DIODES**
Korkut A.
SURFACE REVIEW AND LETTERS, vol.25, 2018 (SCI-Expanded)
- V. **Yarıiletkeni Işıklı Etkileşen Pd/n-GaP Schottky Diyotun Elektriksel Sığa Değişimi Üzerine**
Korkut A., İmer Gencer A., İmer A. G.
Fırat Üniversitesi Fen Bilimleri Dergisi, vol.29, no.2, pp.1-6, 2017 (SCI-Expanded)
- VI. **The Effect of Air-Exposed Layer on Electrical Properties of Cu/n-Si/Al Schottky Diodes**
Korkut A., Bati B.
INTERNATIONAL JOURNAL, vol.5, pp.1-9, 2016 (SSCI)
- VII. **EFFECT ON HEAT CAPACITY OF DEGENERATED ELECTRON GAS IN DIMENSIONALLY QUANTIZED THIN FILMS**
Korkut A., Eminbeyli R.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.22, pp.4243-4249, 2008 (SCI-Expanded)
- VIII. **The Effect Of Quantizing Magnetic Field On Cyclotron Energy And Cyclotron Effective Mass In Size Quantized Films With Non-Parabolic Energy Band**
Korkut A.
Chinese Physics Letters, vol.24, no.9, pp.2639-2641, 2007 (SCI-Expanded)

Articles Published in Other Journals

- I. **Differential Depletion Charge Density of the Approximation of Schottky Di-odes as Ohmic Annealed a Variety of Temperatures**
Korkut A.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.33, no.2, pp.525-539, 2020 (ESCI)
- II. **On differential depletion length of Schottky diodes with copper-nickel alloy metal of front contact**
Korkut A.
TURKISH JOURNAL OF PHYSICS, vol.42, pp.587-599, 2018 (ESCI)
- III. **Effect of Illumination on the Photovoltaic Parameters of Al/p-Si Diode with an Organic Interlayer Prepared by Spin Coating Method**
İmer Gencer A., Tombak A., Korkut A.

Süleyman Demirel Journal of Natural and Applied Sciences, vol.20, pp.1-5, 2017 (Peer-Reviewed Journal)

IV. The Change of Series Resistance and Conductance-Voltage-Frequency Characteristics of Cu/N-Si Schottky Diode Exposed To Air

Korkut A., Bati B.

Journal of Nanotechnology & Advanced Materials, vol.5, no.2, pp.49-55, 2016 (Peer-Reviewed Journal)

Books & Book Chapters

I. HYBRID DEVICE BASED ON NANOSTRUCTURED ZnO FILM DOPED WITH GRAPHENE OXIDE

Imer A. G., Korkut A.

in: International Research in Engineering Sciences III, Mehmet Kamanlı, Editor, Eğitim yayınevi, Konya, pp.21-36, 2022

II. ABOUT A NEW INTERFACE STATE DENSITY APPROXIMATION: BASED ON TRADITIONAL METHODS FOR N-TYPE ORGANIC SCHOTTKY DIODES

Korkut A., Gencer-İmer A. G.

in: Matematik ve Fen Alanında Uluslararası Araştırmalar II (Mart 2021), Dr. Öğr. Üyesi Nevin AKDURA, Editor, Eğitim Yayınevi, Konya, pp.98-137, 2021

Refereed Congress / Symposium Publications in Proceedings

I. The investigation of the fundamental electrical parameters of Ag/n-Si hybrid structure based on functional organic dye

Mahmood O. H., İmer A. G., Ugur A., Korkut A.

2nd International Congress on Semiconductor Materials and Devices (ICSMD), Ardahan, Turkey, 28 - 30 August 2018, vol.46, pp.6966-6970

II. Ab-initio Study of Physical Properties of TbMn2O6

Aycibin M., İmer A. G., Korkut A.

2ND INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES, Ankara, Turkey, 28 - 29 June 2019, pp.131-135

III. Ab-initio study on Electronic structure of LaMn2X (X=Ge, Si)

Aycibin M., Korkut A.

4th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL & APPLIED SCIENCES, Ağrı, Turkey, 19 - 22 June 2019, pp.134

IV. A Comparison Differential Depletion Length by Debye Length for Schottky Diode under the Incident Light

Korkut A., Aycibin M.

4th INTERNATIONAL CONFERENCE ON ADVANCES IN NATURAL & APPLIED SCIENCES, Ankara, Turkey, 19 - 22 June 2019, pp.136

V. About Depletion Time Constant of Differential Depletion Region: when the Paralel Magnetic Field Applied to İnterface of Shottky Diode

Korkut A., İmer A. G., Aycibin M.

4th International Conference on Advance in Natural & Applied Science chemistry (ICANAS 2019), Ağrı, Turkey, 19 - 21 June 2019, pp.32-36

VI. SCHOTTKY DİYOTLARIN SERİ DİRENCİNİN BAZI YÖNTEMLERLE KARŞILAŞTIRILMASI

Korkut A., İmer A. G.

1. ULUSLARARASI İĞDIR MULTİ DİSİPLİNER ÇALIŞMALAR KONGRESİ, Iğdır, Turkey, 6 - 07 November 2018, pp.1298-1305

VII. p-Si/SnEklemin Elektriksel Parametrelerinin Fonksiyonel Boya İnce Film İle Kontrol Edilmesi

Korkut A., İmer A. G.

1. ULUSLARARASI İĞDIR MULTİ DİSİPLİNER ÇALIŞMALAR KONGRESİ, İğdir, Turkey, 6 - 07 November 2018, pp.1306-1311

VIII. **FIRST PRINCIPLE STUDY of CaTa₂O₆ COMPOUND**

Aycibin M., Korkut A.

1. ULUSLARARASI İĞDIR MULTİ DİSİPLİNER ÇALIŞMALAR KONGRESİ, İğdir, Turkey, 6 - 07 November 2018, pp.1341-1345

IX. **OPTICAL PROPERTIES OF CsSi₃(x=1,Br,Cl)**

Aycibin M., Korkut A.

1. ULUSLARARASI İĞDIR MULTİ DİSİPLİNER ÇALIŞMALAR KONGRESİ, İğdir, Turkey, 6 - 07 November 2018, pp.1419-1423

X. **A Hypothetical Approximation on the Serial Resistance of Schottky Diodes**

Korkut A.

2nd International Congress on Semiconductor Materials and Devices (ICSMD2018), Ardahan, Turkey, 28 - 30 August 2018, vol.-, pp.75

XI. **The Comparative Study on the Electrical Parameters of Ag/n-Si and Hybrid structure based on Organic Interlayer**

Mahmood O., İmer A. G., Korkut A.

international conference on physical chemistry and functional materials, Ardahan, Turkey, 28 - 30 August 2018, vol.1, pp.47-51

XII. **What Does the Rectification Number (Coefficient) Explain To the Schottky Diode?**

İmer A. G., Korkut A.

international conference on physical chemistry and functional materials, Elazığ, Turkey, 19 - 21 June 2018, vol.1, pp.129

XIII. **On Differential of Barrier Height Drop (DBHD) The Schottky Effect of Metal/n-Si/Al Schottky Diodes**

Korkut A.

INTERNATIONAL ENGINEERING AND TECHNOLOGY SYMPOSIUM IETS'18 main theme "ENERGY AND PETROLEUM, Batman, Turkey, 3 - 05 May 2018, pp.53

XIV. **Laterally Inhomogeneous Barrier Analysis of Al/p-Si Organic-Inorganic Heterojunction with Inserting TB Thin Film**

İmer A. G., Korkut A., Ocak Y.

INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES, Konya, Turkey, 17 - 19 August 2017, pp.78

XV. **Why Doesn't Equal To One (=1) of Total Serial Resistance to Serial Resistance Obtained from Cheung I Equation Ratio**

Korkut A., İmer Gencer A., İmer A. G.

International Congress on Semiconductor Materials and Devices (ICSMD-2017), Konya, Turkey, 17 - 19 August 2017, vol.PP, no.51, pp.68

XVI. **On Analysis of Differential Depletion Resistance of Pd/N-GaP Schottky Diodes Under Incident Light Onto Semiconductor Surface**

Korkut A.

International Congress on Semiconductor Materials and Devices (ICSMD-2017), Konya, Turkey, 17 - 19 August 2017, no.3214, pp.18

XVII. **The Effect of GO Doping on The Electrical Properties of the High Frequency Ag/GO:CdO/p-Si Devices**

İmer A. G., Korkut A., Tombak A.

INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES, Konya, Turkey, 17 - 19 August 2017, pp.77

XVIII. **The Comparative Study on the Electrical Parameters of Sn/p-Si (MS) and Sn/C₁₄H₁₅N₃/p-Si (MIS) Diodes**

İmer A. G., Korkut A., Yakuphanoglu F., Dere A.

Nanoscience Nanotechnology for Next Generation (NanoNG2016), Antalya, Turkey, 20 - 22 October 2016, pp.132

XIX. **Behaviour of Electrical Capacitance and Depletion Layer of (Ag, Cu, Ni)/n-Si/Al Schottky Diodes by**

Ohmic Temperatures

Korkut A., İmer A. G.

2'nd International Congress on the World of Technology and Advanced Materials, Kırşehir, Turkey, 28 September - 02 October 2016, pp.57

XX. What Does the Rectification Number (Coefficient) Explain To the Schottky Diode?

İmer A. G., Korkut A.

international conference on physical chemistry and functional materials, Elazığ, Turkey, 19 June 2016 - 21 June 2018, vol.1, pp.129

XXI. Havaya Maruz Bırakılmış (Air-Exposed) Schottky Diyotların MS Kalınlığının Karakteristiklere Etkisi Üzerine

Korkut A.

IV.YÜKPOP Uluslararası Vakum Çalıştayı, Afyon, Turkey, 28 - 30 March 2016, pp.18

XXII. Electrical and photoelectrical characteristic investigation of a new generation photodiode based on bromothymol blue dye

Gençer İmer A. G., Tombak A., Korkut A.

International Physics Conference at the Anatolian Peak (IPCAP2016), Erzurum, Turkey, 25 - 27 February 2016, vol.707, pp.12012-12021

XXIII. Electrical Characteristic Parameters of an Organic-Inorganic Device Based on Dimethyl Yellow Dye

İmer A. G., karaduman o., Korkut A.

1st International Conference On Advanced Functional Material Technologies (AFMAT 2015), Antalya, Turkey, 25 - 28 October 2015, pp.46-47

Supported Projects

Korkut A., İmer A. G., Project Supported by Higher Education Institutions, Bazı IV, III-V Yarıiletken MS, MSM, MIS, MIM, SIS Schottky Kontakların Organik veya İnorganik Arayüzeylerinin Diyod Değişkenlerine Etkisi, 2018 - 2022

Bati B., Korkut A., Project Supported by Higher Education Institutions, Temiz Hava Ortamına Maruz Bırakılmış n-Si ve n-GaP Yarıiletkenlerden Üretilmiş Schottky Diyotların Karakteristiklerine Arayüzey Oksit Tabaka Kalınlığının Etkisi, 2014 - 2016

Metrics

Publication: 37

Citation (WoS): 21

Citation (Scopus): 27

H-Index (WoS): 3

H-Index (Scopus): 3

Congress and Symposium Activities

1. ULUSLARARASI İĞDIR MULTİ DİSİPLİNER ÇALIŞMALAR KONGRESİ, Attendee, İğdir, Turkey, 2018

2nd International Congress on Semiconductor Materials and Devices (ICSMD2018), Attendee, Ardahan, Turkey, 2018

INTERNATIONAL ENGINEERING AND TECHNOLOGY SYMPOSIUM IETS'18 main theme "ENERGY AND PETROLEUM, Attendee, Batman, Turkey, 2018

International Congress on Semiconductor Materials and Devices (ICSMD-2017) Konya, Attendee, Konya, Turkey, 2017

WITAM2016 (2nd) Kırşehir, Attendee, Kırşehir, Turkey, 2016

VI.YUKPOP Afyon, Attendee, Afyon, Turkey, 2016

Non Academic Experience

MİLLİ EĞİTİM BAKANLIĞI