

## Prof. BARIŞ KINACI

### Personal Information

Office Phone: [+90 312 202 1280](tel:+903122021280)

Email: [bariskinaci@gazi.edu.tr](mailto:bariskinaci@gazi.edu.tr)

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

### International Researcher IDs

ORCID: 0000-0003-3095-0624

Publons / Web Of Science ResearcherID: AAD-3089-2020

ScopusID: 36181271500

### Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 2009 - 2013

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Turkey 2006 - 2009

Undergraduate, Gazi University, Fen Fakültesi, Fizik, Turkey 2002 - 2006

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, III-V grubu güneş hücre yapılarının epitaksiyel büyütülmesi ve karakterizasyonu, Gazi University, Fen Bilimleri Enstitüsü, 2013

Postgraduate, InxGa1-xAs / GaAs çoklu kuantum kuyu yapısının mbe tekniği ile büyütülmesi: Yapısal, optik ve elektriksel özelliklerinin incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, 2009

### Research Areas

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

### Academic Titles / Tasks

Associate Professor, Gazi University, Uygulamalı Bilimler Fakültesi, Fotonik, 2022 - Continues

Associate Professor, Istanbul University, Faculty Of Science, Department Of Physics, 2019 - 2022

Assistant Professor, Istanbul University, Faculty Of Science, Department Of Physics, 2014 - 2019

### Academic and Administrative Experience

Deputy Head of Department, Gazi University, Uygulamalı Bilimler Fakültesi, Fotonik, 2022 - Continues

Deputy Head of Department, Gazi University, Fen Bilimleri Enstitüsü, Fotonik Bilim ve Mühendisliği, 2022 - Continues  
Vice Dean, Istanbul University, Faculty Of Science, 2018 - 2020  
Deputy Head of Department, Istanbul University, Faculty Of Science, Department Of Physics, 2017 - 2018

## Courses

FOTOVOLTAİK AYGITLAR, Postgraduate, 2022 - 2023

FOTONİK VE ELEKTROMANYETİK, Doctorate, 2022 - 2023

FOTONİKTE ELEKTROMANYETİK DALGALAR , Undergraduate, 2022 - 2023

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Electrical and dielectric properties of RF sputtered nano Al<sub>2</sub>O<sub>3</sub> film annealed at 400 °C**  
Yalçın Y., Arslan Ö., İldeş C., Çokduygulular E., Çetinkaya Ç., Kınacı B.  
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, vol.34, no.25, pp.1786, 2023 (SCI-Expanded)
- II. **Structural and morphological analysis of rf sputtered nano ZnSe coatings as a function of thickness: investigation of the effect of metal contact on MIS structure with ZnSe interfacial layer**  
Balci E., Kınacı B., Çetinkaya Ç., Çokduygulular E., Ataşer T., Akın Sönmez N., Sağlam S., Özçelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.34, no.16, 2023 (SCI-Expanded)
- III. **In-depth analysis on PTB7 based semi-transparent solar cell employing MoO<sub>3</sub>/Ag/WO<sub>3</sub> contact for advanced optical performance and light utilization**  
Çokduygulular E., Çetinkaya Ç., Emik S., Kınacı B.  
SCIENTIFIC REPORTS, vol.13, no.1, pp.7548, 2023 (SCI-Expanded)
- IV. **Tailoring optimal translocation conditions towards proximity of borotellurite glasses to the red spectrum through CeO<sub>2</sub> for practical applications**  
Çetinkaya Ç., Çokduygulular E., Kınacı B., İlik E., Kilic G., Almisned G., Zakaly H. M., Ene A., Tekin H.  
HELIYON, vol.9, no.4, pp.1-2, 2023 (SCI-Expanded)
- V. **Enhancement of significant colour properties through Ta<sub>2</sub>O<sub>5</sub> incorporation into ZnO–TeO<sub>2</sub> binary glasses: An effective method for purposeful utilizations in industry and technology**  
Çokduygulular E., Çetinkaya Ç., Kınacı B., Kilic G., Tekin H.  
OPTICAL MATERIALS, vol.135, pp.113301, 2023 (SCI-Expanded)
- VI. **Enhancement of color and photovoltaic performance of semi-transparent organic solar cell via fine-tuned 1D photonic crystal**  
Çetinkaya Ç., Çokduygulular E., Kınacı B., Emik S., Sönmez N., Özçelik S.  
SCIENTIFIC REPORTS, vol.12, no.1, 2022 (SCI-Expanded)
- VII. **Highly improved light harvesting and photovoltaic performance in CdTe solar cell with functional designed 1D-photonic crystal via light management engineering**  
Çetinkaya Ç., Çokduygulular E., Kınacı B., Guzelcimen F., Özen Y., Akın Sönmez N., Özçelik S.  
SCIENTIFIC REPORTS, vol.12, no.1, 2022 (SCI-Expanded)
- VIII. **Evaluation of dielectric properties of Au/TZO/n-Si structure depending on frequency and voltage**  
Kınacı B., Bairam C., Yalçın Y., Çokduygulular E., Çetinkaya Ç., Efkere H. İ., Özçelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.33, no.13, pp.10516-10523, 2022 (SCI-Expanded)
- IX. **Functional optical design of thickness-optimized transparent conductive dielectric-metal-dielectric plasmonic structure**  
ÇETİNKAYA Ç., ÇOKDUYGULULAR E., GÜZELÇİMEN F., KINACI B.  
SCIENTIFIC REPORTS, vol.12, no.1, 2022 (SCI-Expanded)
- X. **Dielectric Properties of Au/SrTiO<sub>3</sub>/p-Si Structure Obtained by RF Magnetron Sputtering in a Wide Frequency Range**

Kinaci B.

SILICON, vol.14, no.6, pp.2717-2722, 2022 (SCI-Expanded)

- XI. **Influence of V2O5 and B2O3 addition on the sintering behaviour and physical properties of ZnO ceramics**  
Yüksel Price B., Hardal G., Kinaci B.  
Processing and Application of Ceramics, vol.16, no.1, pp.48-54, 2022 (SCI-Expanded)
- XII. **Investigation of the effect of annealing on the structural, morphological and optical properties of RF sputtered WO3 nanostructure**  
Efkere H. İ., Gumrukcu A. E., Özen Y., Kinaci B., Aydın S. Ş., Ates H., Özçelik S.  
PHYSICA B-CONDENSED MATTER, vol.622, 2021 (SCI-Expanded)
- XIII. **Design and fabrication of a semi-transparent solar cell considering the effect of the layer thickness of MoO3/Ag/MoO3 transparent top contact on optical and electrical properties**  
Çetinkaya Ç., Çokduygular E., Kinaci B., Güzelçimen F., Özen Y., Efkere H. İ., Candan İ., Emik S., Özçelik S.  
Scientific Reports, vol.11, no.1, 2021 (SCI-Expanded)
- XIV. **Evaluation on output parameters of the inverted organic solar cells depending on transition-metal-oxide based hole-transporting materials**  
Çetinkaya Ç., Çokduygular E., Kinaci B., Güzelçimen F., Candan İ., Efkere H. İ., Özen Y., Özçelik S.  
Optical Materials, vol.120, 2021 (SCI-Expanded)
- XV. **Structural, morphological, optical and electrical properties of the Ti doped-ZnO (TZO) thin film prepared by RF sputter technique**  
Bairam C., Yalçın Y., EFKERE H. İ., ÇOKDUYGULULAR E., ÇETİNKAYA Ç., KINACI B., ÖZÇELİK S.  
PHYSICA B-CONDENSED MATTER, vol.616, 2021 (SCI-Expanded)
- XVI. **Modeling and Experimental Analysis of Photovoltaic Parameters of GaInP/GaAs Dual Junction p-i-n Solar Cell**  
KINACI B.  
BRAZILIAN JOURNAL OF PHYSICS, vol.51, no.3, pp.553-558, 2021 (SCI-Expanded)
- XVII. **Determination of surface morphology and electrical properties of MoO3 layer deposited on GaAs substrate with RF magnetron sputtering**  
Çetinkaya Ç., Çokduygular E., Özen Y., Candan İ., Kinaci B., Özçelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.9, pp.12330-12339, 2021 (SCI-Expanded)
- XVIII. **The temperature dependent negative dielectric constant phenomena of Au/n-GaAs structure with CZO interfacial layer**  
Kinaci B.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.5, pp.5928-5935, 2021 (SCI-Expanded)
- XIX. **Effect of Annealing on the Surface Morphology and Current-Voltage Characterization of a CZO Structure Prepared by RF Magnetron Sputtering**  
KINACI B., ÇELİK E. G., ÇOKDUYGULULAR E., ÇETİNKAYA Ç., YALÇIN Y., EFKERE H. İ., ÖZEN Y., Sönmez N., ÖZÇELİK S.  
SEMICONDUCTORS, vol.55, no.1, pp.28-36, 2021 (SCI-Expanded)
- XX. **Investigation of V-groove fabricated GaInNAs nipi solar cell structure**  
Muhammetgulyyev A., Yalcin Y., Kuruoglu F., ÇOKDUYGULULAR E., Kinaci B., Erol A.  
OPTICAL AND QUANTUM ELECTRONICS, vol.53, no.1, 2021 (SCI-Expanded)
- XXI. **The effect of thickness on surface structure of rf sputtered TiO2 thin films by XPS, SEM/EDS, AFM and SAM**  
Guzelcimen F., Tanoren B., Cetinkaya C., Kaya M., Efkere H. İ., Özen Y., Bingol D., Sirkeci M., Kinaci B., Ünlü M. B., et al.  
VACUUM, vol.182, 2020 (SCI-Expanded)
- XXII. **A comprehensive study on Cu-doped ZnO (CZO) interlayered MOS structure**  
ÇOKDUYGULULAR E., ÇETİNKAYA Ç., Yalcin Y., KINACI B.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.16, pp.13646-13656, 2020 (SCI-

Expanded)

- XXIII. **Negative capacitance phenomena in Au/SrTiO<sub>3</sub>/p-Si heterojunction structure**  
Kınacı B., Çetinkaya Ç., Çokduygulular E., Efker H. İ., Akın Sönmez N., Özçelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, pp.8718-8726, 2020 (SCI-Expanded)
- XXIV. **Characterization of a GaAs/GaAsBi pin solar cell**  
Muhammetgulyyev A., ERBAŞ Ö. G., KINACI B., DÖNMEZ Ö., ÇELEBİ Y. G., EROL A.  
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.34, no.8, 2019 (SCI-Expanded)
- XXV. **V-groove etched 1-eV-GaInNAs nipi solar cell**  
Muhammetgulyyev A., KINACI B., Aho A., Yalcin Y., ÇETİNKAYA Ç., KURUOĞLU F., Guina M., EROL A.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.125, no.1, 2019 (SCI-Expanded)
- XXVI. **The effects of annealing temperature on RF-coated GZO thin films on n-Si and PET substrates N-Si ve PET alttaşlar üzerine RF-kaplanan GZO ince filmlere tavlama sıcaklığının etkileri**  
AKIN SÖNMEZ N., Donmez M., Comert B., ASAR T., KINACI B., ÖZÇELİK S.  
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.34, no.4, pp.1757-1763, 2019 (SCI-Expanded)
- XXVII. **Influence of RF power on the opto-electrical and structural properties of gallium-doped zinc oxide thin films**  
Akın Sönmez N., Kınacı B., Özen Y., Ozcelik S.  
Journal of Materials Science: Materials in Electronics, vol.28, pp.7376-7384, 2017 (SCI-Expanded)
- XXVIII. **AZO thin film-based UV sensors: effects of RF power on the films**  
AKIN SÖNMEZ N., Baskose U. C., KINACI B., ÇAKMAK M., ÖZÇELİK S.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.119, no.3, pp.965-970, 2015 (SCI-Expanded)
- XXIX. **Performance evaluation of a GaInP/GaAs solar cell structure with the integration of AlGaAs tunnel junction**  
Özen Y., Akın Sönmez N., Kınacı B., Özçelik S.  
SOLAR ENERGY MATERIALS AND SOLAR CELLS, vol.137, pp.1-5, 2015 (SCI-Expanded)
- XXX. **The study on characterizations of SrTiO<sub>3</sub> thin films with different growth temperatures**  
Kınacı B., Akın Sönmez N., Durukan İ., Memmedli T., Ozcelik S.  
SUPERLATTICES AND MICROSTRUCTURES, vol.76, pp.234-243, 2014 (SCI-Expanded)
- XXXI. **Preparation of RF sputtered AZO/Au thin film hydrogen peroxide sensitive electrode for utilization as a biosensor**  
Durukan İ., Caliskan S., Cete S., Cevrimli B. S., Kınacı B., Özen Y., Corekci S., Ozturk M. K., Memmedli T., Ozcelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.25, pp.3154-3159, 2014 (SCI-Expanded)
- XXXII. **Microstructural defect properties of InGaN/GaN blue light emitting diode structures**  
Bas Y., Demirel P., Akın Sönmez N., Baskose C., Özen Y., Kınacı B., Ozturk M. K., Ozcelik S., Ozbay E.  
Journal of Materials Science: Materials in Electronics, vol.25, pp.3924-3932, 2014 (SCI-Expanded)
- XXXIII. **Study on growth and characterizations of GaIn<sub>1-x</sub>P/GaAs solar cell structure**  
Kınacı B., Özen Y., Asar T., Cetin S. Ş., Memmedli T., Kasap M., Ozcelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.24, no.9, pp.3269-3274, 2013 (SCI-Expanded)
- XXXIV. **Analysis of the Temperature Dependence of the Capacitance-Voltage and Conductance-Voltage Characteristics of Au/TiO<sub>2</sub>(rutile)/n-Si Structures**  
KINACI B., ÖZÇELİK S.  
JOURNAL OF ELECTRONIC MATERIALS, vol.42, no.6, pp.1108-1113, 2013 (SCI-Expanded)
- XXXV. **Effect of alloy composition on structural, optical and morphological properties and electrical characteristics of GaIn<sub>1-x</sub>P/GaAs structure**  
Kınacı B., Özen Y., Kizilkaya K., Asar T., Cetin S. Ş., Boyali E., Ozturk M. K., Memmedli T., Ozcelik S.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.24, no.4, pp.1375-1381, 2013 (SCI-Expanded)
- XXXVI. **Electrical characterization of Au/ZnO/TiO<sub>2</sub>/n-Si and (Ni/Au)/ZnO/TiO<sub>2</sub>/n-Si Schottky diodes by using current-voltage measurements**

Kınacı B., Asar T., Cetin S. Ş., Özen Y., Kizilkaya K.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.14, no.11-12, pp.959-963, 2012 (SCI-Expanded)

XXXVII. **The temperature dependent analysis of Au/TiO<sub>2</sub> (rutile)/n-Si (MIS) SBDs using current-voltage-temperature (I-V-T) characteristics**

KINACI B., Cetin S. Ş., Bengi A., ÖZÇELİK S.

MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.15, no.5, pp.531-535, 2012 (SCI-Expanded)

XXXVIII. **Current-voltage (I-V) characteristics of Au/InGaAs/n-GaAs Schottky barrier diodes**

KINACI B., Corekci S., Kizilkaya K., Ozcelik S.

Optoelectronics and Advanced Materials, Rapid Communications, vol.6, pp.327-330, 2012 (SCI-Expanded)

XXXIX. **Analysis of the forward and reverse bias I-V characteristics on Au/PVA: Zn/n-Si Schottky barrier diodes in the wide temperature range**

Tascioglu I., AYDEMİR U., ALTINDAL Ş., KINACI B., ÖZÇELİK S.

JOURNAL OF APPLIED PHYSICS, vol.109, no.5, 2011 (SCI-Expanded)

XL. **The structural and optical properties of InGaAs/GaAs MQW**

KINACI B., Bengi A., Mammadov T., Ozcelik S.

Journal of Optoelectronics and Advanced Materials, vol.13, no.5, pp.505-508, 2011 (SCI-Expanded)

XLI. **The analysis of Au/TiO<sub>2</sub>/n-Si schottky barrier diode at high temperatures using I-V characteristics**

Kınacı B., Asar T., Özen Y., Ozcelik S.

Optoelectronics and Advanced Materials, Rapid Communications, vol.5, no.4, pp.434-437, 2011 (SCI-Expanded)

XLII. **Effect of different P/As ratio on the optical and structural properties of GaAs<sub>1-x</sub>P<sub>x</sub>/GaAs**

Cetin S. Ş., KINACI B., ASAR T., KARS DURUKAN İ., Ozturk M. K., Mammadov T. S., ÖZÇELİK S.

SURFACE AND INTERFACE ANALYSIS, vol.42, pp.1252-1256, 2010 (SCI-Expanded)

XLIII. **Influence of thermal annealing on the structure and optical properties of d.c. magnetron sputtered titanium dioxide thin films**

Kars İ., Cetin S. Ş., KINACI B., Sarikavak B., Bengi A., Altuntas H., Ozturk M. K., Ozcelik S.

SURFACE AND INTERFACE ANALYSIS, vol.42, pp.1247-1251, 2010 (SCI-Expanded)

## Articles Published in Other Journals

I. **Boşluk Taşıma Katmanının (HTL) Ters Çevrilmiş Organik Güneş Hücre Parametrelerine Etkisi**

CANDAN İ., ÖZEN Y., KINACI B.

Gazi Üniversitesi Fen Fakültesi Dergisi, vol.3, no.2, pp.123-132, 2022 (Peer-Reviewed Journal)

II. **Effect on the Electrical Characterizations of Temperature and Frequency Depending on Series Resistance and Interface States in MS Structure**

KINACI B.

JOURNAL OF POLYTECHNIC-POLITEKNİK DERGISI, vol.20, no.2, pp.313-318, 2017 (ESCI)

III. **The Effect of Concentrated System on The Energy Conversion Efficiency of GaAsP/GaAs/Ge Triple Junction Solar Cell**

Kınacı B., Özen Y., Akın N., Özçelik S.

Balkan Physics Letters, vol.24, no.24, pp.220-224, 2016 (Peer-Reviewed Journal)

IV. **Temperature Dependence Electrical Characteristics of n-GaAs Structure Grown by MBE**

Kınacı B., Asar T., Özen Y., Altındal Ş., Mammadov T., Özçelik S.

Azerbaijan Journal of Physics, Fizika, vol.16, no.2, pp.335-338, 2010 (Peer-Reviewed Journal)

V. **Characterization of MBE Grown InGaAs / GaAs Quantum Well Solar Cells (QWSCs)**

ASAR T., KINACI B., AYDEMİR U., MAMMADOV T., ÖZÇELİK S.

Azerbaijan Journal of Physics, Fizika, vol.16, no.2, pp.460-462, 2010 (Peer-Reviewed Journal)

VI. **Series resistance effect on I-V characteristics of Au / n-InP Schottky barrier diodes (SBDs) in the temperature range of 80-400 K**

KORUCU D., ASAR T., KINACI B., AYDEMİR U., MAMMADOV T., ÖZÇELİK S.

Azerbaijan Journal of Physics, Fizika, vol.15, no.2, pp.195-198, 2009 (Peer-Reviewed Journal)

- VII. **Epitaxial Growth and Characterization of GaAs<sub>1-x</sub>P<sub>x</sub> / GaAs Structure**  
KINACI B., ASAR T., ÇETİN S. Ş., MAMMADOV T. S., ÖZÇELİK S.  
Balkan Physics Letters, vol.15, no.1, pp.151049, 2009 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Observation of Anomalous Dielectric Behavior in the Wide Temperature Range of MIS Structure with STO Interlayer**  
KINACI B., ÇETİNKAYA Ç., ÇOKDUYGULULAR E.  
in: INSAC Natural and Engineering Sciences, , Editor, Duvar Yayınları, pp.109-120, 2021

## Refereed Congress / Symposium Publications in Proceedings

- I. **Perovskite Solar Cell Designs by Based on Machine Learning**  
Kara S. G., Ataşer T., Kınacı B., Akın Sönmez N., Özçelik S.  
TURKISH PHYSICAL SOCIETY 39 TH INTERNATIONAL PHYSICS CONGRESS, Muğla, Turkey, 31 August - 04 September 2023, pp.174
- II. **Development of Silver Nanowire Electrodes by Inkjet Printing Technique for Flexible Solar Cells**  
Serbest B., Ataşer T., Kınacı B., Akın Sönmez N., Özçelik S.  
10th International Congress on Fundamental and Applied Sciences 2023 , İstanbul, Turkey, 6 - 08 June 2023, pp.81
- III. **Effect of Metal Contact Selection on the Electrical Characterization of ZnSe Thin Film**  
Balcı E., Ataşer T., Akın Sönmez N., Çetinkaya Ç., Çokduygulular E., Kınacı B.  
9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 - 24 October 2022, pp.63
- IV. **Production of V<sub>2</sub>O<sub>5</sub> Doped Soda-Silicate Glasses with Classical Melt-Quenching Technique and Physical Characterization of These Oxide Glasses**  
ÇETİNKAYA ÇOLAK S., KINACI B., Ercan C.  
Turkish Physical Society-36th International Physics Congress (TPS-36), Muğla/Bodrum, Turkey, 1 - 05 September 2020
- V. **Production of V<sub>2</sub>O<sub>5</sub> Doped Soda-Silicate Glasses with Classical Melt-Quenching Technique and Optical Characterization of These Oxide Glasses**  
ÇETİNKAYA ÇOLAK S., KINACI B.  
Türk Fizik Derneği 35. Uluslar arası Fizik Kongresi-TFD35, 4 - 09 September 2019
- VI. **A Comparison of Characteristics of Heterojunction Pin Solar Cells Based on Dilute Bismide and Dilute Nitride Alloys**  
Muhammetgulyyev A., Erbaş Ö. G., SARCAN F., KINACI B., DÖNMEZ Ö., ÇELEBİ Y. G., EROL A.  
INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND MATERIALS SCIENCE, 11 - 15 October 2017
- VII. **Analysis of the Temperature Dependence of the Capacitance-Voltage Characteristic of Au/SrTiO<sub>3</sub>/p-Si Structures**  
ÖZEN Y., KINACI B., Halil İbrahim E., Akın Sönmez N., ÖZÇELİK S.  
INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND MATERIALS SCIENCE, 11 - 15 October 2017
- VIII. **Study on the Design and Optic Characterization of n-i-p-i GaInNAs Solar Cell**  
KINACI B., Muhammetgulyyev A., EROL A.  
INTERNATIONAL CONFERENCE ON CONDENSED MATTER AND MATERIALS SCIENCE, 11 - 15 October 2017
- IX. **DESIGN OF HIGH EFFICIENCY GAINP/GAAS SOLAR CELL USING DRIFT-DIFFUSION THEORY**  
KINACI B., Muhammetgulyyev A., ÖZEN Y., Akın Sönmez N., ÖZÇELİK S.  
THE PRODUCTION OF MULTI JUNCTION III-V PHOTOVOLTAIC DEVICES, 5 - 10 September 2017
- X. **CDTE/CDS SOLAR CELL STRUCTURE WITH MOO<sub>3</sub>/AU BACK CONTACT**

KINACI B., ÖZEN Y., SÜRÜCÜ G.

TURKISH PHYSICAL SOCIETY 33RD INTERNATIONAL PHYSICS CONGRESS, 5 - 10 September 2017

- XI. **Characterization of Heterojunction pinSolar Cells Based on Dilute Bismide and Dilute Nitride**  
Muhammetgulyyev A., SARCAN F., KINACI B., DÖNMEZ Ö., EROL A.  
8thInternational Workshop on Bismuth-Containing Semiconductors, 23 - 26 July 2017
- XII. **The Effects of Concentrated System on the Electrical Parameters of GaInP/GaAs Solar Cell**  
KINACI B.  
32nd International Physics Congress of Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- XIII. **CHARACTERİZATİON OF HETERO STRUCTURE SİNGLE PİN JUNCTİON SOLAR CELLS BASED ON III N V AND III Bİ V ALLOYS**  
MUHAMMETGULYYEV A., KINACI B., DÖNMEZ Ö., EROL A.  
SOLARTR2016, 6 - 08 November 2016
- XIV. **Deposition of Boron Doped Graphene for CdTe Solar Cell Applications**  
SÜRÜCÜ G., BAYRAKLI Ö., Özen Y., KINACI B.  
2nd International Congress on the World of Technology and Advanced Materials, Kırşehir, Turkey, 28 September - 02 October 2016
- XV. **The Influence of Concentrated System on the Efficiency of GaInP GaAs Ge Concentrated Solar Cell**  
KINACI B.  
2nd International Congress on the World of Technology and Advanced Materials, Kırşehir, Turkey, 28 September - 02 October 2016
- XVI. **The Efficiency Analysis of GaInP GaAs Ge Concentrated Solar Cell**  
KINACI B., Özen Y., Akn N., ÖZÇELİK S.  
Turkish Physical Society 32nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016
- XVII. **Yoğunlaştırılmış Üç Eklemlı Güneş Hücre Yapısının Elektiriksel Analizi**  
Özen Y., Akn N., KINACI B., ÖZÇELİK S.  
21. Yoğun Madde Fiziği Toplantısı, Turkey, 25 December 2015, pp.98
- XVIII. **Reaktif Büyütülen Mg0 40Zn0 60 İnce Filmlerin Karakterizasyonları**  
Akn N., Akçay N., Özen Y., KINACI B., SÜRÜCÜ G., ÖZÇELİK S.  
21. Yoğun Madde Fiziği Toplantısı, Turkey, 25 December 2015, pp.120
- XIX. **Performance Evaluation of CdTe CdS Solar Cell Structure With Concentrated Photovoltaic System**  
KINACI B., Özen Y., Akn N., SÜRÜCÜ G., Aydemir U., ÖZÇELİK S.  
9th International Physics Conference of the Balkan Physical Union, 24 - 27 August 2015
- XX. **The lattice dynamical and electronic properties of PrYbO3 compound from first principles calculations**  
KADEROĞLU Ç., SÜRÜCÜ G., KINACI B.  
11th Nanoscience and Nanotechnology Conference, 22 - 25 June 2015
- XXI. **The study on characterization of sputtered GZO thin films with different RF power**  
Akn N., Cömert B., Dönmez M., Özen Y., Boyalı E., KINACI B., ÖZÇELİK S.  
11th Nanoscience and Nanotechnology Conference, 22 - 25 June 2015
- XXII. **AlGaAs tünel diyot entegrasyonlu GaInP GaAs güneş hücre yapısının performansı üzerine çalışma**  
Özen Y., Akn N., Sertel T., Korkmaz B., ÇETİN S. Ş., ASAR T., KINACI B., ÖZÇELİK S.  
20. Yoğun Madde Fiziği Kongresi, Ankara, Turkey, 26 December 2014, pp.37
- XXIII. **CdTe Based Concentrated Solar Cell Structure**  
KINACI B.  
Turkish Physical Society 31nd International Physics Congress, Muğla, Turkey, 21 - 24 July 2014, pp.318

## Supported Projects

KINACI B., ÖZEN Y., Project Supported by Higher Education Institutions, Yoğunlaştırıcı Termal Elektrik Modül Üretimi,

## 2024 - Continues

Akın Sönmez N., Kınacı B., Özçelik S., Project Supported by Other Private Institutions, PV panellerin geri dönüşüme kazandırılması amacıyla bileşenlerine (Cam ve Solar hücre) ayrılması - REPAN, 2023 - 2025

Özçelik S., Kınacı B., Akın Sönmez N., Öztürk M., Dönmez Kaya M., Technopark, Hacimli Tek Kristal Silisyum Külçelerin Büyütülmesi Süreçlerinin Geliştirilmesi, 2023 - 2025

Akın Sönmez N., Kınacı B., Ataşer T., Özçelik S., TUBITAK Project, Inkjet Baskı Tekniği İle Üretilen Gümüş Nanotel Elektrotlar Kullanılarak Esnek Ve Kursunsuz Perovskit Güneş Hücrelerinin Gelistirilmesi, 2022 - 2025

Kınacı B., Akın Sönmez N., Emik S., Project Supported by Higher Education Institutions, Katkılı elektron taşıma tabakasının ve farklı katkılama oranlarının MAPbI<sub>3</sub> tabanlı perovskit güneş hücresinin fotovoltaik performansı üzerine etkisinin araştırılması, 2023 - 2024

Kınacı B., Çetinkaya Ç., Üzar Kılıç N., TUBITAK Project, Bor Ve Metal Katkılı ZnO İnce Film Şeklindeki Güneş Pili Ve Termoelektrik Jeneratörlerden Oluşan Hibrit Sistemin Verimliliğinin Araştırılması, 2022 - 2023

Kınacı B., TUBITAK Project, 21 yy İçin Yüksek Verimde Gainp GaAs n i p i GaInNAs Güneş Hücreleri, 2016 - 2019

Kınacı B., Project Supported by Other Private Institutions, Çok Eklemli Güneş Hücresi İçeren Yoğunlaştırıcı Sistem Prototip Üretimi, 2017 - 2018

Kınacı B., Project Supported by Higher Education Institutions, Yeni nesil çok eklemli güneş hücrelerinin tasarım ve karakterizasyonu, 2015 - 2018

Kınacı B., Project Supported by Higher Education Institutions, Yoğunlaştırıcı Fotovoltaik Sistem Geliştirilmesi ve Prototip Üretimi, 2017 - 2017

Kınacı B., Project Supported by Other Private Institutions, Yeni Nesil Çok Eklemli Konsantre Güneş Hücresi Prototip Üretimi, 2015 - 2016

Kınacı B., Project Supported by Other Official Institutions, CdTe Bazlı Konsantre Güneş Hücrelerinin Üretimi, 2014 - 2015

## Metrics

Publication: 75

Citation (WoS): 599

Citation (Scopus): 514

H-Index (WoS): 16

H-Index (Scopus): 14