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International Researcher IDs

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Education Information

Doctorate, Ataturk University, Fen Bilimleri, Fizik, Turkey 2000 - 2004

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Turkey 1997 - 2000

Undergraduate, Ataturk University, Fen Dedebiyat Fakültesi, Turkey 1991 - 1995

Dissertations

Doctorate, Sn/PPy/n-Si/Au-Sb Yapının Bazı Karakteristik Parametrelerinin Sıcaklığa Bağlı Akım-Voltaj, Kapasite-Voltaj ve Kapasite-Frekans Ölçümlerinden Tayin Edilmesi, Ataturk University, Fen Bilimleri Enstitüsü, 2004

Postgraduate, Ga₂Te₃ yarıiletken kristalinin büyütülmesi ve anahtarlama özelliğinin incelenmesi, Ataturk University, Fen Bilimleri Enstitüsü, 2000

Research Areas

Physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Surfaces, Interfaces, Thin Films and Nanosystems, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electronic transport in condensed matter, Natural Sciences

Academic Titles / Tasks

Professor, Ataturk University, Fen Fakültesi, Fizik, 2013 - Continues

Associate Professor, Ataturk University, Fen Fakültesi, Fizik, 2007 - 2013

Assistant Professor, Ataturk University, Fen Fakültesi, Fizik, 2004 - 2007

Academic and Administrative Experience

Yayın komisyon üyeliği, Ataturk University, Fen Fakültesi, Fizik, 2021 - Continues

Ethics Committee Member, Ataturk University, Fen Fakültesi, Fizik, 2021 - Continues

BAP Scientific Commissioner, Ataturk University, Fen Fakültesi, Fizik, 2021 - Continues

Director of Vocational School, Ardahan University, Academy Of Health Sciences, 2019 - 2020

Dean, Ardahan University, Faculty Of Health Sciences, 2019 - 2020
Dean, Ardahan University, 2017 - 2020
Vice Rector, Ardahan University, 2017 - 2020
Erasmus Coordinator, Ardahan University, Rectorate, 2017 - 2020
Coordinator of The Rectorate, Ardahan University, Rectorate, 2017 - 2020
BAP Coordinator, Ardahan University, Rectorate, 2017 - 2020
Head of Department, Ataturk University, Fen Fakültesi, 2016 - 2017
Research Institute Director, Ataturk University, 2015 - 2016
Atatürk Üniversitesi, Fen Fakültesi, 2012 - 2016
Atatürk Üniversitesi, Fizik, 2009 - 2012

Courses

Temel Fizik Lab (moleküler biy), Undergraduate, 2023 - 2024
KATIHAL ELEKTRONİĞİ, Postgraduate, 2023 - 2024
OPTOELEKTRONİK, Undergraduate, 2023 - 2024
KATIHAL FİZİĞİ II, Undergraduate, 2023 - 2024
SÜPERİLETKENLİK, Undergraduate, 2023 - 2024
KATIHAL ELEKTRONİĞİ (BAHAR), Postgraduate, 2022 - 2023
KATIHAL ELEKTRONİĞİ, BAHAR, Postgraduate, 2022 - 2023
KATIHAL ELEKTRONİĞİ, Postgraduate, 2023 - 2024
KATIHAL FİZİĞİ-I, Undergraduate, 2023 - 2024
FİZİK-II (ELEKTRONİK MUH), Undergraduate, 2022 - 2023
katıhal fiziği lab, Undergraduate, 2022 - 2023
ISI TRANSFERİ, Undergraduate, 2023 - 2024
KATIHAL FİZİĞİ-II, Undergraduate, 2022 - 2023
TEMEL FİZİK (MOL BİY), Undergraduate, 2022 - 2023
KATIHAL TEORİSİ, Doctorate, 2022 - 2023
TEMEL FİZİK, Undergraduate, 2021 - 2022
(2022 - 2023 Güz) Tıbbi Görüntüleme Teknikleri Programı, Associate Degree, 2022 - 2023
KATIHAL FİZİĞİ-I, Undergraduate, 2021 - 2022
KATIHAL FİZİĞİ I, Undergraduate, 2021 - 2022
KATIHAL FİZİĞİ-I, Undergraduate, 2021 - 2022
KATIHAL ELEKTRONİĞİ, Postgraduate, 2019 - 2020

Advising Theses

Aydoğan Ş., Metal (Au, Ni, Cr)/GO-Fe₃O₄ (NP)/ n-Si /Al heteroyapıların üretimi ve elektriksel özelliklerinin sıcaklığa bağlı olarak incelenmesi, Doctorate, İ.GÜMÜŞ(Student), 2022
Aydoğan Ş., SrTiO₃ Nanoküplerin sentezi, Yapısal Karakterizasyonu ve Heteroeklem Uygulamaları, Doctorate, L.Bilal(Student), 2020
Aydoğan Ş., Gümüş, altın ve gümüş-altın alaşımlı nanoparçacıkların organik güneş pillerinin performansına etkileri, Doctorate, H.KAÇUŞ(Student), 2018
Aydoğan Ş., Fe₃O₄ nanoparçacık ve mpg-C₃N₄ nanokompozit katkılı P3HT:PCBM tabanlı organik güneş pillerinin fabrikasyonu, optik, morfolojik, yapısal ve elektriksel karakterizasyonu, Doctorate, Z.ÇALDIRAN(Student), 2017
Aydoğan Ş., Katkılı perovskit güneş pillerinin üretimi ve fotovoltaiik karakterizasyonu, Doctorate, F.MEHMET(Student), 2016
Aydoğan Ş., Investigation of electrical properties of au/fe₃o₄/p-si/al and au/fe₃o₄/p-si/al heterojunctions dependent on temperature, Doctorate, A.RIZA(Student), 2015

Aydoğan Ş., Au/antrasen/n-Si/Al schottky diyodun temel karakteristik parametrelerinin sıcaklığa bağlı I-V (akım-voltaj) ve C-V(kapasite-voltaj) ölçümlerinden tayin edilmesi, Postgraduate, H.KAÇUŞ(Student), 2014
Aydoğan Ş., X-ışını radyasyonunun metal/organik/yarıiletken doğrultucu kontaklarının I-V (Akım-gerilim) karakteristikleri üzerine etkileri, Postgraduate, Y.ŞAHİN(Student), 2014
Aydoğan Ş., Au/Antrakınon/p-Si/Al schottky diyodun temel karakteristik parametrelerinin sıcaklığa bağlı I-V (Akım-Voltaj) ve C-V Kkapasite-Voltaj) ölçümlerinden tayin edilmesi, Postgraduate, Z.ÇALDIRAN(Student), 2013
Aydoğan Ş., Elektron radyasyonunun Au/n-Si/Au-Sb Schottky kontakların elektriksel karakteristikleri üzerine etkileri, Postgraduate, E.UĞUREL(Student), 2009

Jury Memberships

Doctorate, Doctorate, Karadeniz Teknik Üniversitesi, August, 2021
Doctorate, Doctorate, Karadeniz Teknik Üniversitesi, August, 2021
Associate Professor Exam, Associate Professor Exam, Recep Tayyip Erdoğan Üniversitesi, December, 2020
Doctorate, Doktora tez savunması, ATATÜRK ÜNİVERSİTESİ, January, 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Highly stable, self-powered UV-Vis-NIR broadband isotype photodetector based on Ti-doped amorphous MoO₃**
Şakar B. C., YILDIRIM F., AYDOĞAN Ş.
Sensors and Actuators A: Physical, vol.370, 2024 (SCI-Expanded)
- II. **Dual-functional CuO:Fe₂O₃/n-Si heterojunction with applications in gas sensors and self-powered visible photodetectors**
Sarıtış S., Yıldırım F., Orhan Z., Aydoğan Ş.
Optical Materials, vol.151, 2024 (SCI-Expanded)
- III. **Surface plasmon resonance effects of Ag@ZnO core-shell nanostructure in UV and visible light for photodiode applications**
Yılmaz M., Canpolat N., Aydoğan Ş.
JOURNAL OF THE AMERICAN CERAMIC SOCIETY, vol.107, no.5, pp.3390-3402, 2024 (SCI-Expanded)
- IV. **Self-powered high-performance UV-vis-IR hybrid photovoltaic photodetector based on *Epilobium angustifolium* L. (Onagraceae)**
YILDIRIM F., KARAKAYA S., YUCA H., İNCEKARA Ü., AYDOĞAN Ş.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.979, 2024 (SCI-Expanded)
- V. **Hydrogen gas sensing and photodetector applications on electrofabricated Pd@CuCo₂O₄ nanostructures**
Orhan Z., Öztürk Doğan H., Aydoğan Ş., Sarıtış S., Bingül Z.
CERAMICS INTERNATIONAL, vol.50, no.5, pp.8472-8479, 2024 (SCI-Expanded)
- VI. **P-type π -conjugated BTPDS-8 organic molecule for broadband hybrid photodetector with organic/inorganic heterostructure**
Ganjehyan K., YILDIRIM F., Erdoğan M., DAŞTAN A., AYDOĞAN Ş.
SENSORS AND ACTUATORS A-PHYSICAL, vol.367, 2024 (SCI-Expanded)
- VII. **Self-driven, stable broadband photodetector based on GaAs:CdS heterojunction with ultrahigh on/off ratio and detectivity**
Yıldırım F., Bacaksız E., Türit A., Aydoğan Ş.
SURFACES AND INTERFACES, vol.44, 2024 (SCI-Expanded)
- VIII. **Numerical evaluations of curcumin organic molecule and an experimental study on hybrid photodetector performance in visible and UV regions**
Dogan H. O., Yıldırım F., Orhan Z., Ahmed A. B., Benhaliliba M., Aydoğan Ş.

ORGANIC ELECTRONICS, vol.124, 2024 (SCI-Expanded)

- IX. **Highly responsive self-driven broadband hybrid photodetector with high detectivity and on/off ratio based on *Hibiscus sabdariffa***
Yuca H., Karakaya S., Yıldırım F., İncekara Ü., Aydoğan Ş.
PHYSICA SCRIPTA, vol.98, no.12, 2023 (SCI-Expanded)
- X. **Photodiode behavior and capacitive performance of ZnO nanoflakes synthesized by electrochemical deposition**
YILMAZ M., YILDIRIM F., AYDOĞAN Ş., KOÇYİĞİT A.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.56, no.49, 2023 (SCI-Expanded)
- XI. **An experimental study for thermal sensing applications of PP and PN heterojunctions fabricated in the same architecture and under the same conditions**
Gumus I., AYDOĞAN Ş.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.56, no.40, 2023 (SCI-Expanded)
- XII. **Long-term stable and high responsivity visible-ultraviolet photodetector of Se-doped CdO film on Si by spin coating**
CEVİZ ŞAKAR B., ORHAN Z., Yıldırım F., AYDOĞAN Ş.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.56, no.34, 2023 (SCI-Expanded)
- XIII. **The electrochemical fabrication of CoCr2O4/electro-reduced graphene oxide electrodes for high-performance supercapacitors**
ORHAN Z., AYDOĞAN Ş., ÖZTÜRK DOĞAN H.
Chemical Physics Letters, vol.820, 2023 (SCI-Expanded)
- XIV. **The Electrical Characteristics of the Co/Giemsan-Si Heterostructure Depending on Measurement Temperatures and Frequencies**
KOÇYİĞİT A., AYDOĞAN Ş., İNCEKARA Ü., YILMAZ M.
IEEE SENSORS JOURNAL, vol.23, no.8, pp.8184-8191, 2023 (SCI-Expanded)
- XV. **Conduction mechanism and UV/visible photodetection properties of p-Si/n-SiC heterostructure**
Şakar B. C., YILDIRIM F., ORHAN Z., AYDOĞAN Ş.
OPTICAL AND QUANTUM ELECTRONICS, vol.55, no.4, 2023 (SCI-Expanded)
- XVI. **UV-Visible photovoltaic detector based on biomaterial-inorganic semiconductor in the propolis/n-Si heterojunction configuration**
YILDIRIM F., ORHAN Z., AYDOĞAN Ş.
MATERIALS RESEARCH BULLETIN, vol.159, 2023 (SCI-Expanded)
- XVII. **ZnO micro/nanorods: their performance in the photocatalytic degradation and photodiode**
Yılmaz M., Çırak Ç., Canpolat N., Aydoğan Ş.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.129, no.3, 2023 (SCI-Expanded)
- XVIII. **Highly sensitive self-powered UV-visible photodetector based on ZrO₂-RGO nanofibers/n-Si heterojunction**
YILDIRIM F., Khalili S., ORHAN Z., Chenari H. M., AYDOĞAN Ş.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.935, 2023 (SCI-Expanded)
- XIX. **Improving the performance of the self-powered polymer-based UV/Vis photodetectors via carbon fibers**
Havigh R. S., Chenari H. M., YILDIRIM F., ORHAN Z., AYDOĞAN Ş.
PHYSICA SCRIPTA, vol.98, no.1, 2023 (SCI-Expanded)
- XX. **Pomegranate derivative dye/silicon hybrid photodiode for sensor applications**
Yılmaz M., Demir Y., Aydoğan Ş.
SENSORS AND ACTUATORS A-PHYSICAL, vol.345, 2022 (SCI-Expanded)
- XXI. **Ultraviolet and visible photo-response of transparent conductive Al-doped ZnO (AZO)/n-Silicon isotype heterojunction device**
Ceviz Şakar B., Orhan Z., Yıldırım F., Aydoğan Ş.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.55, no.42, 2022 (SCI-Expanded)
- XXII. **Analysis of the temperature dependent electrical parameters of the heterojunction obtained with Au**

nanoparticles decorated perovskite strontium titanate nanocubes

Tasyurek L. B., AYDOĞAN Ş., SEVİM M., ÇALDIRAN Z.

JOURNAL OF ALLOYS AND COMPOUNDS, vol.914, 2022 (SCI-Expanded)

- XXIII. **Self-powered photosensor based on curcumin:reduced graphene oxide (Cu:rGO)/n-Si heterojunction in visible and UV regions**
Öztürk Doğan H., Aydoğan Ş., Orhan Z., Yıldırım F.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.915, 2022 (SCI-Expanded)
- XXIV. **A comparative study of the ZnO Fibers-based photodetectors on n-Si and p-Si**
Yıldırım F., ORHAN Z., Khalili S., Chenari H. M., AYDOĞAN Ş.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.55, no.39, 2022 (SCI-Expanded)
- XXV. **Photo-sensor characteristics of tannic acid (C₇₆H₅₂O₄₆)/n-Si hybrid bio-photodiode for visible and UV lights detection**
Yıldırım F., ORHAN Z., TAŞKIN M., İNCEKARA Ü., BİBER M., AYDOĞAN Ş.
OPTICS AND LASER TECHNOLOGY, vol.153, 2022 (SCI-Expanded)
- XXVI. **Synthesis characterization of SnO₂ nanofibers (NFs) and application of high-performing photodetectors based on SnO₂ NFs/n-Si heterostructure**
Khalili S., Chenari H. M., ORHAN Z., Yildirim F., AYDOĞAN Ş.
SENSORS AND ACTUATORS A-PHYSICAL, vol.342, 2022 (SCI-Expanded)
- XXVII. **Long-Term Stable, Self-Powered and Highly Sensitive Photodetectors Based on the ZnO:ZrO₂ Composite Fibers (Fs)/N-Si Heterojunction**
ORHAN Z., Yildirim F., Khalili S., Chenari H. M., AYDOĞAN Ş.
JOM, vol.74, no.8, pp.3091-3102, 2022 (SCI-Expanded)
- XXVIII. **The light detection performance of the congo red dye in a Schottky type photodiode**
Kocyigit A., YILMAZ M., İncekara Ü., ŞAHİN Y., AYDOĞAN Ş.
CHEMICAL PHYSICS LETTERS, vol.800, 2022 (SCI-Expanded)
- XXIX. **Effects of PEDOT:PSS and crystal violet interface layers on current-voltage performance of Schottky barrier diodes as a function of temperature and variation of diode capacitance with frequency**
Deniz A., Taş A., Çaldıran Z., İNCEKARA Ü., Biber M., AYDOĞAN Ş., Türot A.
Current Applied Physics, vol.39, pp.173-182, 2022 (SCI-Expanded)
- XXX. **Discrepancies in barrier heights obtained from current-voltage (IV) and capacitance-voltage (CV) of Au/PNOMPhPPy/n-GaAs structures in wide range of temperature**
ALTINDAL Ş., ÖZDEMİR A. F., AYDOĞAN Ş., Turut A.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.33, no.15, pp.12210-12223, 2022 (SCI-Expanded)
- XXXI. **Investigation the Performance of Cr-Doped ZnO Nanocrystalline Thin Film in Photodiode Applications**
Tursucu A., Aydoğan S., Kocyigit A., Ozmen A., Yilmaz M.
JOM, vol.74, no.3, pp.777-786, 2022 (SCI-Expanded)
- XXXII. **The electrical and dielectric characterization of the Co/ZnO-Rods/p-Si heterostructure depending on the frequency**
AYDOĞAN Ş., Kocyigit A., BOZKURT ÇIRAK B., Erdogan E., YILMAZ M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.33, no.9, pp.6059-6069, 2022 (SCI-Expanded)
- XXXIII. **Synthesis of nickel nanoparticles-deposited strontium titanate nanocubes (Ni-STO) and heterojunction electrical applications over a wide temperature range**
Tasyurek L. B., AYDOĞAN Ş., SEVİM M., ÇALDIRAN Z.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.274, 2021 (SCI-Expanded)
- XXXIV. **Density Functional Theory Calculations of Pinus brutia Derivatives and Its Response to Light in a Au/n-Si Device**
YILMAZ M., Demir Y., AYDOĞAN Ş., Grilli M. L.

ENERGIES, vol.14, no.23, 2021 (SCI-Expanded)

- XXXV. **Thermal sensing capability of metal/composite-semiconductor framework device with the low barrier double Gaussian over wide temperature range**
Gumus I., AYDOĞAN Ş.
SENSORS AND ACTUATORS A-PHYSICAL, vol.332, 2021 (SCI-Expanded)
- XXXVI. **Highly sensitive, self-powered photodetector based on reduced graphene oxide- polyvinyl pyrrolidone fibers (Fs)/p-Si heterojunction**
Khalili S., Chenari H. M., Yıldırım F., Orhan Z., Aydoğan Ş.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.889, 2021 (SCI-Expanded)
- XXXVII. **Self-powered ZrO₂ nanofibers/n-Si photodetector with high on/off ratio for detecting very low optical signal**
Yıldırım F., Orhan Z., Khalili S., Chenari H. M., Aydoğan S.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.54, no.47, 2021 (SCI-Expanded)
- XXXVIII. **Dependence of electrical parameters of co/gold-chloride/p-Si diode on frequency and illumination**
Erdogan E., Yılmaz M., Aydoğan Ş., İncekara Ü., Şahin Y.
OPTICAL MATERIALS, vol.121, 2021 (SCI-Expanded)
- XXXIX. **The electrical and dielectric properties of the magnetite nanoparticles supported graphene-oxide/n-Si MOS type device that operates across a wide temperature range**
Gumus I., AYDOĞAN Ş.
SENSORS AND ACTUATORS A-PHYSICAL, vol.331, 2021 (SCI-Expanded)
- XL. **Comparison of n and p type Si-based Schottky photodiode with interlayered Congo red dye**
KOÇYİĞİT A., YILMAZ M., AYDOĞAN Ş., İncekara U., Kacus H.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.135, 2021 (SCI-Expanded)
- XLI. **The photosensitive activity of organic/inorganic hybrid devices based on Aniline Blue dye: Au nanoparticles (AB@Au NPs)**
Kacus H., YILMAZ M., İNCEKARA Ü., KOÇYİĞİT A., AYDOĞAN Ş.
SENSORS AND ACTUATORS A-PHYSICAL, vol.330, 2021 (SCI-Expanded)
- XLII. **Influence of thickness of the sputtered diamond-like carbon (DLC) on electronic and dielectric parameters of the Au/DLC/n-Si heterojunction**
Kurt M. S., Yıldırım F., Orhan Z., Aydoğan S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.20, pp.25214-25224, 2021 (SCI-Expanded)
- XLIII. **Development of a hybrid photodetector device between pyruvic acid (CH₃COCOOH) and silicon**
Orhan Z., Yıldırım F., Taşkın M., İncekara Ü., Aydoğan S.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.36, no.10, 2021 (SCI-Expanded)
- XLIV. **Light Sensitive Properties and Temperature-Dependent Electrical Performance of n-TiO₂/p-Si Anisotype Heterojunction Electrochemically Formed TiO₂ on p-Si**
Koca M., Yılmaz M., Ekinci D., Aydoğan S.
JOURNAL OF ELECTRONIC MATERIALS, vol.50, no.9, pp.5184-5195, 2021 (SCI-Expanded)
- XLV. **A comparative study on electrical characteristics of Ni/n-Si and Ni/p-Si Schottky diodes with Pinus Sylvestris Resin interfacial layer in dark and under illumination at room temperature**
DAŞ E., İNCEKARA Ü., AYDOĞAN Ş.
OPTICAL MATERIALS, vol.119, 2021 (SCI-Expanded)
- XLVI. **The heterojunction diode application of mesoporous graphitic carbon nitride (mpg-C(3)N₄)**
Caldiran Z., Deniz A. R., Sevim M., Aydoğan S.
SUPERLATTICES AND MICROSTRUCTURES, vol.157, 2021 (SCI-Expanded)
- XLVII. **Co/aniline blue/silicon sandwich hybrid heterojunction for photodiode and low-temperature applications**
Kacus H., Şahin Y., Aydoğan Ş., İncekara Ü., Yılmaz M.
JOURNAL OF SANDWICH STRUCTURES & MATERIALS, vol.23, no.6, pp.2547-2565, 2021 (SCI-Expanded)
- XLVIII. **Improving light-sensing behavior of Cu/n-Si photodiode with Human Serum Albumin:**

Microelectronic and dielectric characterization

ORHAN Z., YILMAZ M., AYDOĞAN Ş., TAŞKIN M., İNCEKARA Ü.

Optik, vol.241, 2021 (SCI-Expanded)

- XLIX. **Effects of the photoactive layer properties and current transmission mechanism on optical and electrical characteristics of organic photovoltaic**
ÇALDIRAN Z., AYDOĞAN Ş.
OPTİK, vol.241, 2021 (SCI-Expanded)
- L. **Molecular engineering for donor electron to enhance photodiode properties of Co/n-Si and Co/p-Si structures: The effect of hematoxylin interface**
KOÇYİĞİT A., YILMAZ M., Incekara Ü., AYDOĞAN Ş., Kacus H.
OPTİK, vol.242, 2021 (SCI-Expanded)
- LI. **On the investigation of the electro-optical sensor potential of Boswellia serrata resin**
Yıldırım F., Yılmaz M., İncekara Ü., Aydoğan Ş.
OPTICAL MATERIALS, vol.117, 2021 (SCI-Expanded)
- LII. **Schottky barrier engineering in metal/semiconductor structures for high thermal stability**
Erdogan E., YILMAZ M., AYDOĞAN Ş., İNCEKARA Ü., Kacus H.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.36, no.7, 2021 (SCI-Expanded)
- LIII. **A comparative study on the effect of monodisperse Au and Ag nanoparticles on the performance of organic photovoltaic devices**
Kacus H., Metin O., SEVİM M., BİBER M., Baltakesmez A., AYDOĞAN Ş.
OPTICAL MATERIALS, vol.116, 2021 (SCI-Expanded)
- LIV. **Modification of barrier diode with cationic dye for high power applications**
Erdogan E., Yilmaz M., Aydogan S., Incekara U., Kacus H.
OPTİK, vol.232, 2021 (SCI-Expanded)
- LV. **On thermal and optical sensor applications of chitosan molecule in the Co/Chitosan/p-Si hybrid heterojunction design**
Kacus H., AYDOĞAN Ş., İNCEKARA Ü., YILMAZ M., BİBER M.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.5, pp.6586-6597, 2021 (SCI-Expanded)
- LVI. **An Investigation of Spray Deposited CdO Films and CdO/p-Si Heterojunction at Different Substrate Temperatures**
Turgut G., Aydogan S., Yilmaz M., Ozmen A., Kacus H.
JOM, vol.73, no.2, pp.566-573, 2021 (SCI-Expanded)
- LVII. **Performance improvement of n-TiO₂/p-Si heterojunction by forming of n-TiO₂/polyphenylene/p-Si anisotype sandwich heterojunction**
Koca M., Kudas Z., Ekinci D., Aydogan S.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.121, 2021 (SCI-Expanded)
- LVIII. **Investigation of neodymium rare earth element doping in spray-coated zinc oxide thin films**
ERDOĞAN E., YILMAZ M., AYDOĞAN Ş., TURGUT G.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.2, pp.1379-1391, 2021 (SCI-Expanded)
- LIX. **Temperature dependent electronic transport properties of heterojunctions formed between perovskite SrTiO₃ nanocubes and silicon**
Tasyurek L. B., AYDOĞAN Ş., SEVİM M., Caldiran Z.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.23, pp.20833-20846, 2020 (SCI-Expanded)
- LX. **Light-sensing behaviors of organic/n-Si bio-hybrid photodiodes based on malachite green (MG) organic dye**
YILMAZ M., Kocyigit A., AYDOĞAN Ş., İNCEKARA Ü., Tursucu A., Kacus H.
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- LXI. **Optoelectronic properties of Co/pentacene/Si MIS heterojunction photodiode**
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Congress and Symposium Activities

2. International Congress on Semiconductor Materials and Devices , Working Group, Ardahan, Turkey, 2018

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Aydoğan Ş., Telif Eser (Kitap) Dalında Üçüncülük Ödülü, Atatürk Üniversitesi, March 2016

Aydoğan Ş., Proje Dalında Takdir Belgesi, Atatürk Üniversitesi Rektörlüğü, April 2015

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