

Prof. EMRE GÜR

Personal Information

Office Phone: [+90 222 239 3750](tel:+902222393750) Extension: 2809

Fax Phone: [+90 +90 222 239 3578](tel:+902222393578)

Email: emre.gur@ogu.edu.tr

Other Email: emregur25@gmail.com

Web: <https://avesis.ogu.edu.tr/emre.gur>

Address: Eskişehir Osmangazi Üniversitesi, Fen Fakültesi, Fizik Bölümü, 26040 Meşelik, Eskişehir

International Researcher IDs

ScholarID: IJPsQmoAAAAJ

ORCID: 0000-0002-3606-2751

Publons / Web Of Science ResearcherID: GWP-4725-2022

ScopusID: 7006531071

Yoksis Researcher ID: 38906

Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2003 - 2007

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 2001 - 2003

Undergraduate, Middle East Technical University, Faculty Of Arts And Sciences, Department Of Physics, Turkey 1993 - 1999

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Çinko Oksit Yarıiletkeninin Yapısal, Optik ve Elektriksel Karakterizasyon Teknikleriyle İncelenmesi, Ataturk University, Fen Bilimleri Enstitüsü, 2007

Postgraduate, II-VI Bileşik Yarıiletken Çinko Oksitte Nokta Kusurların Elektriksel İletkenliğe Etkileri, Ataturk University, Fen Bilimleri Enstitüsü, 2003

Research Areas

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

Academic Titles / Tasks

Professor, Eskişehir Osmangazi University, FEN FAKÜLTESİ, FİZİK BÖLÜMÜ, 2022 - Continues

Professor, Ataturk University, Fen Fakültesi, Fizik, 2018 - 2022

Professor, The University of Manchester, Malzeme Okulu, Ulusal Grafen Enstitüsü, 2018 - 2018
Associate Professor, Ataturk University, Fen Fakültesi, Fizik, 2013 - 2018
Associate Professor, Ihsan Dogramaci Bilkent University, Faculty Of Science, Department Of Physics, 2015 - 2015
Assistant Professor, Ataturk University, Fen Fakültesi, 2007 - 2013
Assistant Professor, Ohio State University, Department of Electrical and Computer Engineering , 2010 - 2012
Assistant Professor, Ohio State University, Department of Electrical and Computer Engineering, 2009 - 2010
Research Assistant, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, 2001 - 2007

Academic and Administrative Experience

Assistant Director of the Institute, Ataturk University, Fen Bilimleri Enstitüsü, 2021 - 2022
Deputy Director of the Center, Ataturk University, 2019 - 2022
Deputy Director of the Center, Ataturk University, 2015 - 2018
Deputy Head of Department, Ataturk University, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik Anabilim Dalı, 2013 - 2017

Courses

Nanoscience and Nanotechnology, Postgraduate, 2021 - 2022, 2020 - 2021
Malzeme bilimi, Undergraduate, 2021 - 2022
Yarıiletken Aygıt Fiziği , Postgraduate, 2020 - 2021
Optik, Undergraduate, 2020 - 2021
Yarıiletken Aygıtlar , Postgraduate, 2021 - 2022
Nanofizik, Undergraduate, 2021 - 2022
Yarıiletken Fiziği, Undergraduate, 2020 - 2021

Advising Theses

Gür E., Geçiş metal dikalkojenitlerin süperkapasitör aygıtlarda elektrot olarak kullanılması, Doctorate, U.PERİŞANOĞLU(Student), 2023
Gür E., Saçırma yöntemiyle 2-boyutlu WS₂ katmanlarının büyüme dinamiğinin incelenmesi, Doctorate, Y.KOÇAK(Student), 2019
Gür E., RF saçırma yöntemi ile büyütülen GaN filmlerinde AlN tampon varlığının incelenmesi, Postgraduate, A.COŞKUN(Student), 2018
Gür E., Geçiş metal oksit tabanlı katodik elektrokromik aygıt uygulamaları, Doctorate, G.MERHAN(Student), 2018
Gür E., Geçirgen iletken oksit ince filmlerin büyütülmesi ve karakteristiklerinin optimizasyonu, Postgraduate, S.MOBTAKERI(Student), 2017
Gür E., Molibden oksit ince filmlerin saçırma metodu ile büyütülmesi ve karakteristiklerinin incelenmesi, Postgraduate, A.FEIZOLLAHI(Student), 2016
Gür E., Development of ITO (In₂O₃ – SnO₂) based gas sensors, Postgraduate, S.İŞİK(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Electrochromic properties of undoped and Ti-doped MoO₃ converted from vertical nanowall MoS₂ thin films**
Habashyani S., Mobtakeri S., BUDAK H. F., KASAPÖĞLU A. E., ÇOBAN Ö., GÜR E.
Electrochimica Acta, vol.498, 2024 (SCI-Expanded)
- II. **Layered Transition Metal Sulfides for Supercapacitor Applications**

ÖZTÜRK O., Gur E.

CHEMELECTROCHEM, vol.11, no.11, 2024 (SCI-Expanded)

- III. **Photoconductivity of functionalized carbon nanotubes**
Abaszade R., Mammadov A., Khanmamedova E., Aliyev F., Kotsyubynsky V., GÜR E., Soltabayev B., Margitych M., Stetsenko M., Singh A., et al.
Digest Journal of Nanomaterials and Biostructures, vol.19, no.2, pp.837-843, 2024 (SCI-Expanded)
- IV. **Influence of Highly Efficient Carbon Doping on Al_xGa_{1-x}As Layers with Different Al Compositions (x) Grown by MOVPE**
Perkitel I., Kekuel R., ALTUNTAŞ İ., GÜR E., DEMİR İ.
JOURNAL OF ELECTRONIC MATERIALS, vol.52, no.9, pp.6042-6051, 2023 (SCI-Expanded)
- V. **Structural, optical, and H₂ gas sensing analyses of Cr doped CuO thin films grown by ultrasonic spray pyrolysis**
Güldüren M. E., İSKENDERÖĞLU D., GÜNEY H., MORKOÇ KARADENİZ S., ACAR M., GÜR E.
International Journal of Hydrogen Energy, vol.48, no.54, pp.20804-20814, 2023 (SCI-Expanded)
- VI. **Effect of growth pressure on sulfur content of RF-magnetron sputtered WS₂ films and thermal oxidation properties of them toward using Pd decorated WO₃ based H₂ gas sensor**
Mobtakeri S., Habashyani S., ÇOBAN Ö., BUDAK H. F., KASAPÖĞLU A. E., GÜR E.
Sensors and Actuators B: Chemical, vol.381, 2023 (SCI-Expanded)
- VII. **Investigation of the growth temperature effect on H-2 gas detection for ZnO thin films**
Sag H. K., GÜR E., Ertug M.
OPTICAL MATERIALS, vol.137, 2023 (SCI-Expanded)
- VIII. **Comprehensive growth and characterization study of GeO_x/Si**
Baghdedi D., Hopoğlu H., SARITAŞ S., DEMİR İ., ALTUNTAŞ İ., Abdelmoula N., GÜR E., Tüzemen E. Ş.
Journal of Molecular Structure, vol.1274, 2023 (SCI-Expanded)
- IX. **Experimental and theoretical insights on the structural and optical properties of GeO_x thin films deposited via RF magnetron sputtering under varying oxygen percentage**
ŞENADİM TÜZEMEN E., Hopoğlu H., SARITAŞ S., AYDINOĞLU H. S., ERTUĞRUL M., Maslov M., KAYA S., UNGAN F., GÜR E.
Physica B: Condensed Matter, vol.650, 2023 (SCI-Expanded)
- X. **Investigating the influence of Ni doping on the CuO thin films deposited via ultrasonic spray pyrolysis: Structural, optical and H₂ gas sensing analyses**
Güldüren M. E., İSKENDERÖĞLU D., GÜNEY H., GÜR E., ACAR M., MORKOÇ KARADENİZ S.
International Journal of Hydrogen Energy, vol.48, no.2, pp.828-839, 2023 (SCI-Expanded)
- XI. **In-situ controlled oxidation of sputtered WS₂ nano-walls for high-performance WO₃ electrochromic devices**
Habashyani S., Mobtakeri S., GÜR E.
Electrochimica Acta, vol.437, 2023 (SCI-Expanded)
- XII. **Transfer-free, scalable vertical heterostructure FET on MoS₂/WS₂ continuous films**
ACAR M., ERTUĞRUL M., GÜR E.
NANOTECHNOLOGY, vol.33, no.47, 2022 (SCI-Expanded)
- XIII. **High optical response NiO, Pd/NiO and Pd/WO₃ hydrogen sensors**
ÇOBAN Ö., Tekmen S., Gur E., TÜZEMEN S.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.60, pp.25454-25464, 2022 (SCI-Expanded)
- XIV. **Highly Responsive Pd-Decorated MoO₃ Nanowall H-2 Gas Sensors Obtained from In-Situ-Controlled Thermal Oxidation of Sputtered MoS₂ Films**
Mobtakeri S., Habashyani S., Gur E.
ACS APPLIED MATERIALS & INTERFACES, vol.14, no.22, pp.25741-25752, 2022 (SCI-Expanded)
- XV. **Efficient CdS quantum dot sensitized solar cells based on electrochemically reduced graphene oxide (ERGO)/ZnO nanowall photoanodes and MoS₂, WS₂, CuS cascaded counter electrodes**
Eryigit M., Mobtakeri S., Gur E. P., Temur E., ÖZNÜLÜER ÖZER T., Demir U., GÜR E.
SOLAR ENERGY, vol.234, pp.348-359, 2022 (SCI-Expanded)

- XVI. **Solution-Processable Growth and Characterization of Dandelion-like ZnO:B Microflower Structures**
Erat S., Braun A., Cetinkaya S., Yildirimcan S., KASAPOĞLU A. E., Guer E., Harputlu E., Ocakoglu K.
CRYSTALS, vol.12, no.1, 2022 (SCI-Expanded)
- XVII. **Ultra-conductive wires with cascaded carbon nanotube/Cu structure**
Ozmen A., Mobtakeri S., Kocak Y., Akbaba U., ERTUĞRUL M., GÜR E.
DIAMOND AND RELATED MATERIALS, vol.120, 2021 (SCI-Expanded)
- XVIII. **Characterization of multilayer Al doping in ZnO**
ŞENADIM TÜZEMEN E., Muglu G. M., ALAYDİN B. Ö., ALTUN D., KILIÇ ÇETİN S., GÜR E.
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.57, no.4, pp.1039-1047, 2021 (SCI-Expanded)
- XIX. **Production of novel carbon nanostructures by electrochemical reduction of polychlorinated organic rings under mild conditions for supercapacitors**
Kudas Z., ÇEPNİ E., GÜR E., EKİNCİ D.
NEW JOURNAL OF CHEMISTRY, vol.45, no.32, pp.14765-14778, 2021 (SCI-Expanded)
- XX. **Influence of the PALE growth temperature on quality of MOVPE grown AlN/Si (111)**
ALTUNTAŞ İ., Kocak M. N., Yolcu G., BUDAK H. F., KASAPOĞLU A. E., Horoz S., GÜR E., DEMİR İ.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.127, 2021 (SCI-Expanded)
- XXI. **The effect of the change in the amount of Sb doping in ZnO nanorods for hydrogen gas sensors**
KASAPOĞLU A. E., Habashyani S., Baltakesmez A., İSKENDEROĞLU D., GÜR E.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.46, no.41, 2021 (SCI-Expanded)
- XXII. **Photoluminescence and structural properties of zirconium dioxide thin films produced by RF sputtering technique**
Bakacak P. K., GÜR E., Bayram O., TÜZEMEN S., Simsek O.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.6, pp.7541-7549, 2021 (SCI-Expanded)
- XXIII. **Platinum activated WO₃ optical hydrogen sensors**
ÇOBAN Ö., GÜR E., TÜZEMEN S.
MATERIALS TODAY : PROCEEDINGS, vol.46, pp.6913-6915, 2021 (SCI-Expanded)
- XXIV. **Gallium oxide films deposition by RF magnetron sputtering; a detailed analysis on the effects of deposition pressure and sputtering power and annealing**
Mobtakeri S., AKALTUN Y., ÖZER A., Kilic M., ŞENADIM TÜZEMEN E., GÜR E.
CERAMICS INTERNATIONAL, vol.47, no.2, pp.1721-1727, 2021 (SCI-Expanded)
- XXV. **Single-step, large-area, variable thickness sputtered WS₂ film-based field effect transistors**
ACAR M., Mobtakeri S., EFEOĞLU H., ERTUĞRUL M., GÜR E.
CERAMICS INTERNATIONAL, vol.46, no.17, pp.26854-26860, 2020 (SCI-Expanded)
- XXVI. **Influences of thickness and temperature of low temperature GaAs buffer layer on two-step MOVPE grown GaAs/Ge heterostructures**
DEMİR İ., KASAPOĞLU A. E., BUDAK H. F., GÜR E., Elagoz S.
EUROPEAN PHYSICAL JOURNAL-APPLIED PHYSICS, vol.90, no.2, 2020 (SCI-Expanded)
- XXVII. **Growth Control of WS₂: From 2D Layer by Layer to 3D Vertical Standing Nanowalls**
Kocak Y., GÜR E.
ACS APPLIED MATERIALS & INTERFACES, vol.12, no.13, pp.15785-15792, 2020 (SCI-Expanded)
- XXVIII. **X-ray photoelectron spectroscopy (XPS) and gamma-ray shielding investigation of boro-silicate glasses contained alkali/alkaline modifier**
Kaky K. M., ŞAKAR E., Akbaba U., KASAPOĞLU A. E., Sayyed M. I., GÜR E., Baki S. O., Mahdi M. A.
RESULTS IN PHYSICS, vol.14, 2019 (SCI-Expanded)
- XXIX. **AlGaN/AlN MOVPE heteroepitaxy: pulsed co-doping SiH₄ and TMIn**
DEMİR İ., Kocak Y., KASAPOĞLU A. E., Razeghi M., GÜR E., Elagoz S.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.34, no.7, 2019 (SCI-Expanded)
- XXX. **Single, co-doping and triple doping Fe element in the ZnO crystal matrices**
FİDAN M., İSKENDEROĞLU D., Kocak Y., Benzait Z., GÜR E.
MATERIALS RESEARCH EXPRESS, vol.6, no.4, 2019 (SCI-Expanded)

- XXXI. **Distributed contact flip chip InGaN/GaN blue LED; comparison with conventional LEDs**
Genc M., Sheremet V., Elci M., KASAPOĞLU A. E., ALTUNTAŞ İ., DEMİR İ., Egin G., Islamoglu S., GÜR E., Muzafferoglu N., et al.
SUPERLATTICES AND MICROSTRUCTURES, vol.128, pp.9-13, 2019 (SCI-Expanded)
- XXXII. **Formation of carbon nanowalls by pulsed filtered cathodic vacuum arc deposition**
ŞENADIM TÜZEMEN E., Kilic M., Zeyrek B. K., KASAPOĞLU A. E., GÜR E., ALAYDİN B. Ö., ESEN M., ESEN R.
DIAMOND AND RELATED MATERIALS, vol.93, pp.200-207, 2019 (SCI-Expanded)
- XXXIII. **Valance band properties of MgZnO thin films with increasing Mg content; phase separation effects**
İSKENDEROĞLU D., Kasapoglu E., GÜR E.
MATERIALS RESEARCH EXPRESS, vol.6, no.3, 2019 (SCI-Expanded)
- XXXIV. **Microstructural Evolution of MOVPE Grown GaN by the Carrier Gas**
DEMİR İ., ALTUNTAŞ İ., KASAPOĞLU A. E., Mobtakeri S., Guer E., Elagoz S.
SEMICONDUCTORS, vol.52, no.16, pp.2030-2038, 2018 (SCI-Expanded)
- XXXV. **Gamma and neutron irradiation effects on multi-walled carbon nanotubes**
Akbaba U., KASAPOĞLU A. E., GÜR E.
DIAMOND AND RELATED MATERIALS, vol.87, pp.242-247, 2018 (SCI-Expanded)
- XXXVI. **Synthesis of Graphene-like Films by Electrochemical Reduction of Polyhalogenated Aromatic Compounds and their Electrochemical Capacitor Applications**
Kudas Z., GÜR E., EKİNCİ D.
LANGMUIR, vol.34, no.27, pp.7958-7970, 2018 (SCI-Expanded)
- XXXVII. **Stress evolution of Ge nanocrystals in dielectric matrices**
Bahariqushchi R., Raciti R., Kasapoglu A. E., GÜR E., Sezen M., KALAY Y. E., Mirabella S., Aydinli A.
NANOTECHNOLOGY, vol.29, no.18, 2018 (SCI-Expanded)
- XXXVIII. **Oxygen partial pressure effects on the RF sputtered p-type NiO hydrogen gas sensors**
TURGUT E., ÇOBAN Ö., SARITAŞ S., TÜZEMEN S., YILDIRIM M., GÜR E.
APPLIED SURFACE SCIENCE, vol.435, pp.880-885, 2018 (SCI-Expanded)
- XXXIX. **Effects of gold nanoparticles on the growth of ZnO thin films and p-Si/ZnO heterostructures**
Baltakesmez A., Yenisoay A., TÜZEMEN S., GÜR E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.74, pp.249-254, 2018 (SCI-Expanded)
- XL. **The effects of two-stage HT-GaN growth with different V/III ratios during 3D-2D transition**
ALTUNTAŞ İ., DEMİR İ., KASAPOĞLU A. E., Mobtakeri S., GÜR E., Elagoz S.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.51, no.3, 2018 (SCI-Expanded)
- XLII. **Interfacial engineering of CuO nanorod/ZnO nanowire hybrid nanostructure photoanode in dye-sensitized solar cell**
Kilic B., Turkdogan S., ASTAM A., Baran S. S., Asgin M., GÜR E., Kocak Y.
JOURNAL OF NANOPARTICLE RESEARCH, vol.20, no.1, 2018 (SCI-Expanded)
- XLIII. **Synthesis and characterization of p-GaSe thin films and the analyses of I-V and C-V measurements of p-GaSe/p-Si heterojunction under electron irradiation**
Demir K. C., AYDOĞAN Ş., GÜR E., Coskun C., Aygun Z.
RADIATION EFFECTS AND DEFECTS IN SOLIDS, vol.172, no.7-8, pp.650-663, 2017 (SCI-Expanded)
- XLIII. **Deep level defects in N-rich and In-rich In_xGa_{1-x}N: in composition dependence**
GÜR E., Akyol F., Krishnamoorthy S., Rajan S., Ringel S. A.
SUPERLATTICES AND MICROSTRUCTURES, vol.99, pp.67-71, 2016 (SCI-Expanded)
- XLIV. **Impurity-free quantum well intermixing for large optical cavity high-power laser diode structures**
Kahraman A., GÜR E., Aydinli A.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.31, no.8, 2016 (SCI-Expanded)
- XLV. **Band gap engineering and modifying surface of TiO₂ nanostructures by Fe₂O₃ for enhanced-performance of dye sensitized solar cell**
Kilic B., Gedik N., Mucur S. P., HERGÜL A. S., GÜR E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.31, pp.363-371, 2015 (SCI-Expanded)
- XLVI. **Deep levels in a-plane, high Mg-content Mg_xZn_{1-x}O epitaxial layers grown by molecular beam**

epitaxy

GÜR E., Tabares G., Arehart A., Chauveau J. M., Hierro A., Ringel S. A.

JOURNAL OF APPLIED PHYSICS, vol.112, no.12, 2012 (SCI-Expanded)

XLVII. Nanoporous ZnO Photoelectrode for Dye-Sensitized Solar Cell

Kilic B., GÜR E., TÜZEMEN S.

JOURNAL OF NANOMATERIALS, vol.2012, 2012 (SCI-Expanded)

XLVIII. Detailed characterization of deep level defects in InGaN Schottky diodes by optical and thermal deep level spectroscopies

GÜR E., Zhang Z., Krishnamoorthy S., Rajan S., Ringel S. A.

APPLIED PHYSICS LETTERS, vol.99, no.9, 2011 (SCI-Expanded)

XLIX. N-Polar III-Nitride Green (540 nm) Light Emitting Diode

Akyol F., Nath D. N., GÜR E., Park P. S., Rajan S.

JAPANESE JOURNAL OF APPLIED PHYSICS, vol.50, no.5, 2011 (SCI-Expanded)

L. Growth model for plasma-assisted molecular beam epitaxy of N-polar and Ga-polar In_xGa_{1-x}N

Nath D. N., Guer E., Ringel S. A., Rajan S.

JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B, vol.29, no.2, 2011 (SCI-Expanded)

LI. Molecular beam epitaxy of N-polar InGaN

Nath D. N., GÜR E., Ringel S. A., Rajan S.

APPLIED PHYSICS LETTERS, vol.97, no.7, 2010 (SCI-Expanded)

LII. Structural, optical, and electrical properties of n-ZnO/p-GaAs heterojunction

Tekmen S., GÜR E., Asil H., Cinar K., Coskun C., TÜZEMEN S.

PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, vol.207, no.6, pp.1464-1467, 2010 (SCI-Expanded)

LIII. The effect of the electron irradiation on the series resistance of Au/Ni/6H-SiC and Au/Ni/4H-SiC Schottky contacts

Cinar K., Coskun C., AYDOĞAN Ş., Asil H., GÜR E.

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.268, no.6, pp.616-621, 2010 (SCI-Expanded)

LIV. Nanoporous structures on ZnO thin films

GÜR E., Kilic B., Coskun C., TÜZEMEN S., BAYRAKÇEKEN NİŞANCI F.

SUPERLATTICES AND MICROSTRUCTURES, vol.47, no.1, pp.182-186, 2010 (SCI-Expanded)

LV. Temperature dependent capacitance and DLTS studies of Ni/n-type 6H-SiC Schottky diode

Duman S., GÜR E., Dogan S., TÜZEMEN S.

CURRENT APPLIED PHYSICS, vol.9, no.6, pp.1181-1185, 2009 (SCI-Expanded)

LVI. Oxygen effects on radiation hardness of ZnO thin films

GÜR E., Asil H., Cinar K., Coskun C., TÜZEMEN S., Meral K., ONGANER Y., ŞERİFOĞLU K.

JOURNAL OF VACUUM SCIENCE & TECHNOLOGY B, vol.27, no.5, pp.2232-2237, 2009 (SCI-Expanded)

LVII. Electrochemical growth of n-ZnO onto the p-type GaN substrate: p-n heterojunction characteristics

Asil H., GÜR E., Cinar K., Coskun C.

APPLIED PHYSICS LETTERS, vol.94, no.25, 2009 (SCI-Expanded)

LVIII. Temperature-dependent electrical characterization of nitrogen-doped ZnO thin film: vacuum annealing effect

GÜR E., TÜZEMEN S., DOĞAN S.

PHYSICA SCRIPTA, vol.79, no.3, 2009 (SCI-Expanded)

LIX. Oxygen deficiency effects on recombination lifetime and photoluminescence characteristics of ZnO thin films; correlation with crystal structure

GÜR E., TÜZEMEN S., Meral K., ONGANER Y.

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.94, no.3, pp.549-554, 2009 (SCI-Expanded)

LX. Optical and structural comparison between nitrogen-doped and oxygen-rich ZnO thin films

GÜR E., TÜZEMEN S.

PHILOSOPHICAL MAGAZINE, vol.89, no.12, pp.1081-1089, 2009 (SCI-Expanded)

- LXI. **Radiation effects on ohmic and Schottky contacts based on 4H and 6H-SiC**
Cinar K., Coskun C., Guer E., AYDOĞAN Ş.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.267, no.1, pp.87-90, 2009 (SCI-Expanded)
- LXII. **Determination of the transport mechanisms in mixed conduction of reactively sputtered ZnO thin films**
TÜZEMEN S., GÜR E., DOĞAN S.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.41, no.13, 2008 (SCI-Expanded)
- LXIII. **High energy electron irradiation effects on electrical properties of Au/n-ZnO Schottky diodes**
Guer E., Coskun C., Tuzemen S.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.41, no.10, 2008 (SCI-Expanded)
- LXIV. **Optical and structural properties of ZnO thin films; effects of high energy electron irradiation and annealing**
GÜR E., Asil H., Coskun C., TÜZEMEN S., Meral K., ONGANER Y., ŞERİFOĞLU K.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.266, no.9, pp.2021-2026, 2008 (SCI-Expanded)
- LXV. **Principal issues in producing new ultraviolet light emitters based on transparent semiconductor zinc oxide**
Tuzemen S., GÜR E.
OPTICAL MATERIALS, vol.30, no.2, pp.292-310, 2007 (SCI-Expanded)
- LXVI. **High-temperature Schottky diode characteristics of bulk ZnO**
GÜR E., Tuzemen S., Kilic B., Coskun C.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.19, no.19, 2007 (SCI-Expanded)
- LXVII. **An investigation of control mechanisms of the excitonic behavior in reactively sputtered ZnO on (0001) Al₂O₃**
Tuzemen S., GÜR E., Yildirim T., Xiong G., Williams R. T.
JOURNAL OF APPLIED PHYSICS, vol.100, no.10, 2006 (SCI-Expanded)
- LXVIII. **Wide-bandgap modification of polycrystalline ZnO using Sn component on the basis of developing quantum-well hetero-structure**
Yildirim T., GÜR E., Tuzemen S., Bilgin V., Kose S., Atay F., AKYÜZ İ.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.27, pp.290-295, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Investigation of thermal properties of gadolinium doped carbon nanotubes** Дослідження термічних властивостей вуглецевих нанотрубок допованих гадолінієм
Abaszade R., Aliyev E., Mammadov A., Khanmamadova E., Guliyev A., Aliyev F., Zapukhlyak R., Budak H., Kasapoglu A., Margitych T., et al.
Physics and Chemistry of Solid State, vol.25, no.1, pp.142-147, 2024 (ESCI)
- II. **PHOTOCONDUCTIVITY OF GADOLINIUM-DOPED CARBON NANOTUBES**
Mammadov A. G., Abaszade R. G., Babanli M. B., Kotsyubynsky V. O., GÜR E., Soltabayev B. D., Margitych T. O., Stetsenko M. O.
International Journal on Technical and Physical Problems of Engineering, vol.15, no.3, pp.53-58, 2023 (Scopus)
- III. **Influence of gadolinium doping on structural properties of carbon nanotubes** Вплив допування гадолінієм на структурні властивості вуглецевих нанотрубок
Abaszade R., Babanli M., Kotsyubynsky V., Mammadov A., GÜR E., Kapush O., Stetsenko M., Zapukhlyak R.
Physics and Chemistry of Solid State, vol.24, no.1, pp.153-158, 2023 (ESCI)
- IV. **Investigation of thermal properties of carbon nanotubes and carboxyl group-functionalized carbon nanotubes** Дослідження теплових властивостей вуглецевих нанотрубок і карбоксильних груп – функціоналізованих вуглецевих нанотрубок

Abaszade R., Aliyev E., Babanlı M., Kotsyubynsky V., Zapukhlyak R., Mammadov A., Budak H., Kasapoglu A., GÜR E., Margitych T., et al.

Physics and Chemistry of Solid State, vol.24, no.3, pp.530-535, 2023 (ESCI)

V. PHOTOCONDUCTIVITY OF CARBON NANOTUBES

Mammadov A., Abaszade R., Kotsyubynsky V., GÜR E., Bayramov I., Khanmamadova E., Kapush O.

International Journal on Technical and Physical Problems of Engineering, vol.14, no.3, pp.155-160, 2022 (Scopus)

VI. MODELING OF VOLTAGE-AMPERE CHARACTERISTIC STRUCTURES ON THE BASIS OF GRAPHENE OXIDE/SULFUR COMPOUNDS

Abaszade R., Mammadov A., Kotsyubynsky V., GÜR E., Bayramov I., Khanmamadova E., Kapush O.

International Journal on Technical and Physical Problems of Engineering, vol.14, no.2, pp.302-306, 2022 (Scopus)

VII. Structural and Electrical Properties of the Sulfur-Doped Graphene Oxide/Graphite Oxide Nanocomposite

Abaszade R. G., Mamedov A. G., Bayramov I. Y., Khanmamadova E. A., Kotsyubynsky V. O., Kapush O. A., Boychuk V. M., Gur E.

PHYSICS AND CHEMISTRY OF SOLID STATE, vol.23, no.2, pp.256-260, 2022 (ESCI)

VIII. ITO gas sensors for CO₂ and H₂ detection

Işık S., ÇOBAN Ö., Shafai C., GÜR E.

Journal of Anatolian Physics and Astronomy, 2022 (Peer-Reviewed Journal)

IX. Fabrication and Analysis Of 2D/3D Heterojunction Between Continuous Few-layer WS₂ Film and Si (100)

ACAR M., Mobtakeri S., ERTUĞRUL M., GÜR E.

Hittite Journal of Science and Engineering, vol.8, 2021 (Peer-Reviewed Journal)

X. Sputtered 2D transition metal dichalcogenides: from growth to device applications

ACAR M., GÜR E.

TURKISH JOURNAL OF PHYSICS, vol.45, no.3, pp.131-147, 2021 (ESCI)

XI. Characterization of Gallium Oxide/glass thin films grown by RF magnetron sputtering

Mobtakeri S., ŞENADIM TÜZEMEN E., ÖZER A., GÜR E.

CUMHURİYET SCIENCE JOURNAL, vol.41, no.4, pp.929-937, 2020 (Peer-Reviewed Journal)

XII. Effective annealing of ZnO thin films grown by electrochemical deposition technique

Coşkun C., GÜNEY H., GÜR E., TÜZEMEN S.

Turkish Journal of Physics, vol.33, no.1, pp.49-56, 2009 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. Defects in III-V nitride materials and devices

GÜR E.

4 International Symposium on Advanced Materials and Nanotechnology 2020 (ISAMN2020), Kuala-Lumpur, Malaysia, 1 - 03 December 2020

II. PECVD grown SiN photonic crystal micro-domes for the light extraction enhancement of GaN LEDs

Genç M., V S., ALTUNTAŞ İ., DEMİR İ., GÜR E., elagöz s., GÜLSEREN O., AYDINLI A., Özgür Ü., v a., et al.

GALLIUM NITRIDE MATERIALS AND DEVICES XV, San-Francisco, Costa Rica, 4 - 06 February 2020, vol.11280

III. CZTS Growth for Solar Cell Application by Electrochemical Deposition: pH Effect

GÜR E., SARITAŞ S., Demir E., Demir K. C., Coskun C.

2019 IEEE Regional Symposium on Micro and Nanoelectronics, RSM 2019, Genting Highland, Pahang, Malaysia, 21 - 23 August 2019, pp.123-125

IV. Outstanding Optical and Electrical Hydrogen Gas Sensing Performance of WO₃ Nano-Walls

GÜR E., Mobtakeri S., ÇOBAN Ö., Habashyani S.

2019 IEEE Regional Symposium on Micro and Nanoelectronics, RSM 2019, Genting Highland, Pahang, Malaysia, 21 - 23 August 2019, pp.50-52

V. Growth and Characterization of InGaN Thin Films on Si (111) Substrate by RF Magnetron

Sputtering: N-2 Gas Flow Effect

ERDOĞAN E., KUNDAKÇI M., KASAPOĞLU A. E., GÜR E.

33rd International Physics Congress of the Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 10 September 2017, vol.1935

- VI. **Magnetron sputtered WS₂; optical and structural analysis**
KOÇAK Y., Akaltun Y., Gur E.
International Physics Conference at the Anatolian Peak (IPCAP), Erzurum, Turkey, 25 - 27 February 2016, vol.707
- VII. **Growth conditions effects on the H-2 and CO₂ gas sensing properties of Indium Tin Oxide**
Isik S., ÇOBAN Ö., Shafai C., TÜZEMEN S., GÜR E.
International Physics Conference at the Anatolian Peak (IPCAP), Erzurum, Turkey, 25 - 27 February 2016, vol.707
- VIII. **Oxygen partial pressure effects on the magnetron sputtered WO₃ films**
Muglu G. M., Gur E.
International Physics Conference at the Anatolian Peak (IPCAP), Erzurum, Turkey, 25 - 27 February 2016, vol.707
- IX. **Improved growth quality of the ZnO thin films on Au nano-particles/p-Si**
GÜR E., Baltakesmez A., TÜZEMEN S., Yenisoy A.
10th IEEE Regional Symposium on Micro and Nano Electronics, RSM 2015, Kuala-Terengganu, Malaysia, 19 - 21 August 2015
- X. **Enhancement of free exciton peak intensity in reactively sputtered ZnO thin films on (0001) Al₂O₃**
Tuezemen S., Guer E., Yildirim T., Xiong G., Williams R. T.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.287-288

Supported Projects

- Gür E., Ertuğrul M., TUBITAK Project, Kuantum Çağlayan Lazerler, Aygıtlar Ve Uygulamaları (Kuantay), 2023 - 2027
- Gür E., Gürbulak B., TUBITAK Project, 2B Inse, Gase Ve Mos₂ Katmanlı Yapıların Grafine Edilmiş Knt-Pamuk Üzerine Saçtırma İle Büyütülmesi Ve/Veya Yüklenmesi İle Oluşturulan Kompozit Süperkapasitör Aygıtlar, 2023 - 2025
- Gür E., Kavaz E., TUBITAK Project, Geçiş Metal Diselenidli Esnek Süperkapasitör Elektrotların Üretimi/Karakterizasyonu Ve Süperkapasitör Aygıt Tasarımı, 2023 - 2025
- Gür E., Ceyhan S. B., TUBITAK Project, Floresan İşaretili Polistren Nanoplastik Parçacıkların Zebra Balığı Beynindeki Hücre İnteraksiyonunun ve Muhtemel Hasar Mekanizmalarının Tespiti, 2022 - 2025
- Gür E., İskenderoğlu D., TUBITAK Project, Ms-Cvd Tekniği İle Platin Grubu 2b Dikalkojenlerin Büyütülmesi Ve Fotodedektör Fabrikasyonu Ve Testleri, 2022 - 2024
- Gür E., Demir Ü., TUBITAK Project, Enerji ve Çevresel Uygulamalar İçin TiO₂ Fotokatalizörün Elektroedüktif Katkılanarak Görünür Bölgede Aktifleştirilmesi, 2022 - 2024
- Gür E., Akyol F., TUBITAK Project, Ultra Geniş Bant Aralıklı Rutil-Geo₂ Tek Kristal Yapıların Düşük Basınçlı Kimyasal Buhar Biriktirme Yöntemiyle Büyütülmesi Ve Karakterizasyonu, 2022 - 2024
- Gür E., TUBITAK Project, Dikey Nano-Duvar Yapılı MoS₂'xxlerin MoO₃'xxe Dönüştürülmesiyle Yüksek Performanslı Aygıt Uygulamaları, 2021 - 2024
- Gür E., TUBITAK Project, Yüksek Performanslı Dikey Nano-Duvarlı Mos₂-Moo₃ Tabanlı Hidrojen Gaz Sensörü Geliştirilmesi, 2021 - 2022
- Gür E., Akyol F., TUBITAK Project, β -(Al_xIn_yGa(1-x-y))₂O₃ tabakalarının düşük basınç kimyasal biriktirme (LPCVD) ile büyütülmesi ve aygıt uygulamalarının gerçekleştirilmesi, 2019 - 2022
- Gür E., Demir İ., TUBITAK Project, Yüksek güç-frekans uygulamaları için MOCVD ile epitaksiyel AlN kristalinin büyütülmesi, katkılanması, karakterizasyonu ve aygıt üretimi, 2019 - 2021
- Gür E., Genç R., TUBITAK Project, Flüoresans Karbon Nanoparçacıkların Üçüncü Nesil Perovskit Güneş Hücre Performansı Üzerindeki Etkilerinin İncelenmesi, 2017 - 2020
- Gür E., Demir Ü., TUBITAK Project, Kuantum Parçacık Duyarlı Güneş Hücreleri için Yeni Nesil Nanokompozit Elektrotlar, 2017 - 2020
- Gür E., Çınar Demir K., TUBITAK Project, Elektrokimyasal Büyütme Tekniği ile CZTS Tabanlı Güneş Pillerinin Oluşumu ve

Karakterizasyonu, 2017 - 2020

Gür E., Ertuğrul M., TUBITAK Project, Karbon Nanomalzeme-Bakır Kompozit Yapıların Tellerin Akım Tasıma Kapasitelerinin Vellekenliklerinin Arastırılması, 2016 - 2019

Gür E., Gülseren O., TUBITAK Project, Prototip LED Çip Geliştirilmesi, 2015 - 2019

Gür E., Tüzemen S., TUBITAK Project, Geniş Bant Aralıklı Yarıiletkenlerden ZnO Aktif Tabakalı Morötesi LED ve Foto sensörlerin Geliştirilmesi, 2010 - 2013

Gür E., Coşkun C., TUBITAK Project, Geniş ve Direk Bant Aralıklı ZnO in Elektrokimyasal Yöntemle Tek Kristal Büyütülmesi Karakterizasyonu ve Mümkün Elektronik Uygulamalarının Arastırılması, 2010 - 2013

Activities in Scientific Journals

NanoEra, Editor, 2021 - Continues

JOURNAL OF ANATOLIAN PHYSICS AND ASTRONOMY, Editor, 2021 - Continues

TURKISH JOURNAL OF PHYSICS, Editor, 2021 - Continues

Gazi Üniversitesi Fen Fakültesi Dergisi , Editor, 2020 - Continues

Scientific Consultations

SVT Associates, Scientific Consultancy, Atatürk Üniversitesi, Fen Fakültesi, Fizik, Turkey, 2021 - 2023

ERMAKSAN, Scientific Consultancy, Atatürk Üniversitesi, Fen Fakültesi, Fizik, Turkey, 2019 - 2021

Metrics

Publication: 90

Citation (WoS): 1134

Citation (Scopus): 1222

H-Index (WoS): 20

H-Index (Scopus): 21

Entrepreneurship Activities

Other, EMRE GÜR, 31 January 2022, Founder Owner