Prof. MEHMET KASAP

Personal Information

Office Phone: +90 312 202 1246
Email: mkasap@gazi.edu.tr
Web: https://avesis.gazi.edu.tr/mkasap

International Researcher IDs
ScholarID: 0VORZowAAAAJ
ORCID: 0000-0001-6214-7620
Publons / Web Of Science ResearcherID: AHE-8287-2022
Yoksis Researcher ID: 2692

Education Information

Doctorate, University of Surrey, England 1990 - 1994
Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Yl) (Tezli), Turkey 1985 - 1989
Undergraduate, Firat University, Faculty Of Arts And Scıences, Fizik Mühendisliği Pr., Turkey 1981 - 1985

Dissertations

Doctorate, Temperature and Pressure Dependent of Electron Transport in Plastically Relaxed InxGa1-xAs, University of Surrey, 1994
Postgraduate, Enerji band hesaplamalarında APW metodu ve bazı geçiş elementlerine uygulanması, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Yl) (Tezli), 1988

Research Areas

Surfaces, Interfaces, Thin Films and Nanosystems, Electronic structure of bulk material, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Magnetic Properties and Materials, Optical Properties, Spectroscopy of Matter, Electronic transport in condensed matter

Academic Titles / Tasks

Professor, Gazi University, Fen Fakültesi, Fizik, 2006 - Continues
Associate Professor, Gazi University, Fen Fakültesi, Fizik, 2000 - 2006
Assistant Professor, Gazi University, Fen Fakültesi, Fizik, 1996 - 2000
Research Assistant, Gazi University, Fen Fakültesi, Fizik, 1985 - 1996

Courses

YARIİLETKEN FİZİĞİ, Undergraduate, 2017 - 2018, 2016 - 2017
TEMEL FİZİK II (ELEKTRİK), Undergraduate, 2017 - 2018
Maddenin Özellikleri, Undergraduate, 2017 - 2018

YARIİLETKEN FİZİĞİ, Postgraduate, 2017 - 2018, 2016 - 2017
TEMEL FİZİK I (MEKANİK), Undergraduate, 2017 - 2018, 2016 - 2017

Advising Theses

KASAP M., The Fabrıcatıon Of Au/(Mgo-Pvp) /N-Si (Mps) Schottky Barrıer Dıodes And The Investıgatıon Theır Electrıcal And Dıelectrıcal Properties, Doctorate, A.EROĞLU(Student), 2021
KASAP M., Investıgatıon Of Structural And Electrıcal Properties Of Zno Thın Fılms By Mıst Chemıcal Vapor Deposıtıon Method On Sapphıre Wıth Dıfferent Orıentatıon, Postgraduate, M.YAYLA(Student), 2021
KASAP M., Forensic Sciences In Terms Of Shot Residue Analysis Techniques And Forensic Applications, Doctorate, İ.KARA(Student), 2014
KASAP M., Electron Transport Properties Of Ingan And Gan Quantum Well Inaln/Gan High Electron Mobility Transistor, Postgraduate, P.NARİN(Student), 2014
KASAP M., The investigation of temperature dependent electrical transport properties of InxGa1-xP/GaAs, Postgraduate, E.BOYALI(Student), 2013
KASAP M., Temperature dependent electrical properties of high doped InxGa1-xAs alloy semiconductor, Postgraduate, E.YAZBAHAR(Student), 2012
KASAP M., Electron and magnetotransport properties of ınaln/gan based hıgh electron mobılıty transıstors (HEMT), Doctorate, P.TUNAY(Student), 2010
KASAP M., AlGaN/GaN temelli yüksek elektron hareketlilikli transistörlerin (HEMT) elektron ve manyeto iletim özellikleri, Doctorate, S.BORA(Student), 2008
KASAP M., ELECTRON TRANSPORT PROPERTİES OF InxGa1-xN, Doctorate, A.YILDIZ(Student), 2008
KASAP M., AlGaN/GaN TEMELLİ YÜKSEK ELEKTRON HAREKETLİLİKLİ TRANSİSTÖRLERİN (HEMT) ELEKTRON VE MANYETO İLETİM ÖZELLİKLERİ, Doctorate, S.Bora(Student), 2008
KASAP M., LEC tekniği ile büyütülen Zn katkılı InAs yarıiletkeninde sıcaklık bağımlı manyetik ve elektron iletim özellikleri, Postgraduate, İ.KARA(Student), 2006
KASAP M., MBE tekniği ile büyütülen InGaAs/GaAs ve A1GaAs yarıiletkenlerinin iletim özellikleri, Postgraduate, S.BORA(Student), 2005
KASAP M., LEC tekniği ile büyütülen Te katkılı n-Tipi InSb yarıiletkeninde sıcaklık bağımlı manyetik ve elektron iletim özellikleri, Postgraduate, Ü.YURDUGÜL(Student), 2005
KASAP M., GaN yarıiletken kristalinde elektron iletimi, Postgraduate, A.YILDIZ(Student), 2004
KASAP M., InAs yarıiletken kristalinde elektron iletimi, Postgraduate, D.DEMİR(Student), 2004
KASAP M., LEC tekniği ile büyütülen bulk InAs yarıiletkenin magneto ve elektron iletim özellikleri, Postgraduate, N.KEREM(Student), 2004
KASAP M., LEC tekniği ile büyütülen Te katkılı n-tipi GaSb yarı iletkeninde sıcaklık bağımlı manyetik ve elektron iletim özellikleri, Postgraduate, B.YASEMİN(Student), 2004
KASAP M., GaAs ve InP yarıiletkenlerde elektriksel karakterizasyon, Doctorate, S.ACAR(Student), 2003
KASAP M., In0.51Ga0.49As ve In0.60Ga0.40As yarıiletkenlerinde mobilite hesaplamaları, Postgraduate, S.DEMİREZEN(Student), 2001

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Temperature dependent electron transport properties of degenerate SnO2 thin films**
Boyali E., Baran V., ASAR T., Ozcelik S., Kasap M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.692, pp.119-123, 2017 (SCI-Expanded)

II. **Evaluation of morphological and chemical differences of gunshot residues in different ammunitions using SEM/EDS technique**
Kara I., Sarikavak Y., LİŞESİVDİN S. B., KASAP M.
ENVIRONMENTAL FORENSICS, vol.17, no.1, pp.68-79, 2016 (SCI-Expanded)

III. **The Relationship Between the Surface Morphology and Chemical Composition of Gunshot Residue Particles**
Kara I., LİŞESİVDİN S. B., Kasap M., Er E., Uzek U.
JOURNAL OF FORENSIC SCIENCES, vol.60, no.4, pp.1030-1033, 2015 (SCI-Expanded)

IV. **Electron Transport Properties of Two-Dimensional Electron Gas in BexZn1-xO/ZnO Heterostructures**
Atmaca G., Narin P., Lisesivdin S. B., Kasap M., Sarikavak-Lisesivdin B.
PHILOSOPHICAL MAGAZINE, vol.95, no.1, pp.79-89, 2015 (SCI-Expanded)

V. **Analysis Of The Number Of Shots Using Graphite Furnace Atomic AbsorptionSpectrometry On The Gunshot Residues Deposited in The Barrel**
KARA İ., YALÇINKAYA Ö., LİSESİVDİN S. B., KASAP M.
SYLWAN, vol.159, no.1, pp.14-26, 2015 (SCI-Expanded)

VI. **Study on growth and characterizations of GaxIn1-xP/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)

VII. **Investigation of AlInN HEMT structures with different AlGaN buffer layers grown on sapphire substrates by MOCVD**
Kelekci O., Tasli P., Cetin S. Ş., Kasap M., Ozcelik S., Ozbay E.
CURRENT APPLIED PHYSICS, vol.12, no.6, pp.1600-1605, 2012 (SCI-Expanded)

VIII. **Electron transport properties in Al0.25Ga0.75N/AlN/GaN heterostructures with different InGaN back barrier layers and GaN channel thicknesses grown by MOCVD**
Kelekci O., Tasli P. T., Yu H., KASAP M., ÖZÇELİK S., ÖZBAY E.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, vol.209, no.3, pp.434-438, 2012 (SCI-Expanded)

IX. **Epitaxial growth and electrical characterization of germanium**
Bosi M., Attolini G., Ferrari C., Frigeri C., Calicchio M., Gombia E., Asar T., Boyali E., Aydemir U., Ozcelik S., et al.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.46, no.8, pp.813-817, 2011 (SCI-Expanded)

X. **Grain Boundary Related Electrical Transport in Al-rich AlxGa1-xN Layers Grown by Metal-Organic Chemical Vapor Deposition**
Yildiz A., Tasli P., Sarikavak B., Lisesivdin S. B., Ozturk M. K., Kasap M., Ozcelik S., Ozbay E.
SEMICONDUCTORS, vol.45, no.1, pp.33-36, 2011 (SCI-Expanded)

XI. **Electron-Electron Interactions in Sb-Doped SnO2 Thin Films**
Serin T., Yildiz A., SERİN N., Yildirim N., Ozyurt F., KASAP M.
JOURNAL OF ELECTRONIC MATERIALS, vol.39, no.8, pp.1152-1158, 2010 (SCI-Expanded)

XII. **The substrate temperature dependent electrical properties of titanium dioxide thin films**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Mardare D.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.21, no.7, pp.692-697, 2010 (SCI-Expanded)

XIII. **Double subband occupation of the two-dimensional electron gas in InxAl1-xN/AlN/GaN/AlN heterostructures with a low indium content (0.064 <= x <= 0.140) barrier**
LİŞESİVDİN S. B., Tasli P., Kasap M., Ozturk M., Arslan E., Ozcelik S., Ozbay E.
THIN SOLID FILMS, vol.518, no.19, pp.5572-5575, 2010 (SCI-Expanded)

XIV. **Scattering analysis of two-dimensional electrons in AlGaN/GaN with bulk related parameters extracted by simple parallel conduction extraction method**
Lişesivdin S. B., Yildiz A., Balkan N., Kasap M., Ozcelik S., Ozbay E.
JOURNAL OF APPLIED PHYSICS, vol.108, no.1, 2010 (SCI-Expanded)

XV. **Determination of the critical indium composition corresponding to the metal-insulator transition in InxGa1-xN (0.06 <= x <= 0.135) layers**
Yildiz A., LİŞESİVDİN S. B., Tasli P., Ozbay E., Kasap M.
CURRENT APPLIED PHYSICS, vol.10, no.3, pp.838-841, 2010 (SCI-Expanded)

XVI. **The temperature dependence of the inelastic scattering time in InGaN grown by MOVPE**
Yildiz A., Kasap M.

LOW TEMPERATURE PHYSICS, vol.36, no.4, pp.320-324, 2010 (SCI-Expanded)

XVII. **Analysis of defect related optical transitions in biased AlGaN/GaN heterostructures**
Bengi A., LİŞESİVDİN S. B., Kasap M., Mammadov T., Ozcelik S., Ozbay E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.13, no.2, pp.105-108, 2010 (SCI-Expanded)

XVIII. **The thickness effect on the electrical conduction mechanism in titanium oxide thin films**
Yildiz A., Serin N., Kasap M., Serin T., Mardare D.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.493, pp.227-232, 2010 (SCI-Expanded)

XIX. **Investigation of low-temperature electrical conduction mechanisms in highly resistive GaN bulk layers extracted with Simple Parallel Conduction Extraction Method**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Ozcelik S., Ozbay E., Balkan N.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.98, no.3, pp.557-563, 2010 (SCI-Expanded)

XX. **Well parameters of two-dimensional electron gas in Al0.88In0.12N/AlN/GaN/AlN heterostructures grown by MOCVD**
Tasli P., LİŞESİVDİN S. B., Yildiz A., Kasap M., Arslan E., Ozcelik S., Ozbay E.
CRYSTAL RESEARCH AND TECHNOLOGY, vol.45, no.2, pp.133-139, 2010 (SCI-Expanded)

XXI. **Contributions of impurity band and electron-electron interactions to magnetoconductance in AlGaN**
Tasli P., Yildiz A., Kasap M., Ozbay E., LİŞESİVDİN S. B., Ozcelik S.
PHILOSOPHICAL MAGAZINE, vol.90, no.26, pp.3591-3599, 2010 (SCI-Expanded)

XXII. **Electrical conduction properties of Si delta-doped GaAs grown by MBE**
Yildiz A., LİŞESİVDİN S. B., Altuntas H., Kasap M., Ozcelik S.
PHYSICA B-CONDENSED MATTER, vol.404, no.21, pp.4202-4206, 2009 (SCI-Expanded)

XXIII. **Crossover from Nearest-Neighbor Hopping Conduction to Efros-Shklovskii Variable-Range Hopping Conduction in Hydrogenated Amorphous Silicon Films**
Yildiz A., SERİN N., Serin T., KASAP M.
JAPANESE JOURNAL OF APPLIED PHYSICS, vol.48, no.11, 2009 (SCI-Expanded)

XXIV. **The effect of intrinsic defects on the hole transport in Cu2O**
Yildiz A., Serin N., Serin T., Kasap M.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.3, no.10, pp.1034-1037, 2009 (SCI-Expanded)

XXV. **Structural, electrical and optical characterization of InGaN layers grown by MOVPE**
Yildiz A., Kemal O. M., Bosi M., Ozcelik S., Kasap M.
CHINESE PHYSICS B, vol.18, no.9, pp.4007-4012, 2009 (SCI-Expanded)

XXVI. **DX-center energy calculation with quantitative mobility spectrum analysis in n-AlGaAs/GaAs structures with low Al content**
LİŞESİVDİN S. B., Altuntas H., Yildiz A., Kasap M., Ozbay E., Ozcelik S.
SUPERLATTICES AND MICROSTRUCTURES, vol.45, no.6, pp.604-611, 2009 (SCI-Expanded)

XXVII. **Numerical optimization of Al-mole fractions and layer thicknesses in normally-on AlGaN-GaN double-channel high electron mobility transistors (DCHEMTs)**
Atmaca G., Elibol K., LİŞESİVDİN S. B., Kasap M., Ozbay E.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.11, no.5, pp.578-582, 2009 (SCI-Expanded)

XXVIII. **Large zero-field spin splitting in AlGaN/AlN/GaN/AlN heterostructures**
LİŞESİVDİN S. B., Balkan N., Makarovsky O., Patane A., Yildiz A., Caliskan M. D., Kasap M., Ozcelik S., Ozbay E.
JOURNAL OF APPLIED PHYSICS, vol.105, no.9, 2009 (SCI-Expanded)

XXIX. **Non-adiabatic small polaron hopping conduction in Nb-doped TiO2 thin film**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Mardare D.
PHYSICA B-CONDENSED MATTER, vol.404, pp.1423-1426, 2009 (SCI-Expanded)

XXX. **Anomalous temperature dependence of the electrical resistivity in In0.17Ga0.83N**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Bosi M.
SOLID STATE COMMUNICATIONS, vol.149, pp.337-340, 2009 (SCI-Expanded)

XXXI. **Comparison of the transport properties of high quality AlGaN/AlN/GaN and AlInN/AlN/GaN two-dimensional electron gas heterostructures**

TÜLEK R., ILGAZ A., GÖKDEN S., TEKE A., Ozturk M. K., KASAP M., Ozcelik S., Arslan E., ÖZBAY E.
JOURNAL OF APPLIED PHYSICS, vol.105, no.1, 2009 (SCI-Expanded)

XXXII. **Electrical properties of TiO(2) thin films**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Mardare D.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.354, pp.4944-4947, 2008 (SCI-Expanded)

XXXIII. **Growth parameter investigation of Al0.25Ga0.75N/GaN/AlN heterostructures with Hall effect measurements**
LİŞESİVDİN S. B., Demirezen S., Caliskan M. D., Yildiz A., Kasap M., Ozcelik S., Ozbay E.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.23, no.9, 2008 (SCI-Expanded)

XXXIV. **The persistent photoconductivity effect in AlGaN/GaN heterostructures grown on sapphire and SiC substrates**
Arslan E., Butun S., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., ÖZBAY E.
JOURNAL OF APPLIED PHYSICS, vol.103, no.10, 2008 (SCI-Expanded)

XXXV. **Stokes shift and band gap bowing in InxGa1-xN (0.060 <= x <= 0.105) grown by metalorganic vapour phase epitaxy**
Yildiz A., Dagdelen F., ACAR S., LİŞESİVDİN S. B., Kasap M., AYDOĞDU Y., Bosi M.
ACTA PHYSICA POLONICA A, vol.113, no.2, pp.731-739, 2008 (SCI-Expanded)

XXXVI. **Determination of two-dimensional electron and hole gas carriers in AlGaN/GaN/AlN heterostructures grown by Metal Organic Chemical Vapor Deposition**
ACAR S., LİŞESİVDİN S. B., Kasap M., Oezcelik S., Oezbay E.
THIN SOLID FILMS, vol.516, no.8, pp.2041-2044, 2008 (SCI-Expanded)

XXXVII. **Self-consistent scattering analysis of Al0.2Ga0.8N/AlN/GaN/AlN heterostructures grown on 6H-SiC substrates using photo-Hall effect measurements**
LİŞESİVDİN S. B., Arslan E., Kasap M., Ozcelik S., Ozbay E.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.20, no.4, 2008 (SCI-Expanded)

XXXVIII. **The effect of strain relaxation on electron transport in undoped Al0.25Ga0.75N/GaN heterostructures**
LİŞESİVDİN S. B., Yildiz A., ACAR S., Kasap M., Oezcelik S., Oezbay E.
PHYSICA B-CONDENSED MATTER, vol.399, no.2, pp.132-137, 2007 (SCI-Expanded)

XXXIX. **Electron transport in Ga-rich InxGa1-xN alloys**
Yildiz A., LİŞESİVDİN S. B., ACAR S., Kasap M., Bosi M.
CHINESE PHYSICS LETTERS, vol.24, no.10, pp.2930-2933, 2007 (SCI-Expanded)

XL. **Electronic transport characterization of AlGaN/GaN heterostructures using quantitative mobility spectrum analysis**
LİŞESİVDİN S. B., Yildiz A., ACAR S., Kasap M., Ozcelik S., Ozbay E.
APPLIED PHYSICS LETTERS, vol.91, no.10, 2007 (SCI-Expanded)

XLI. **Temperature-dependent electron transport in In0.5Ga0.5P/GaAs grown by MOVPE**
ACAR S., Yildiz A., Kasap M., Bosi M.
CHINESE PHYSICS LETTERS, vol.24, no.8, pp.2373-2375, 2007 (SCI-Expanded)

XLII. **Scattering analysis of 2DEG carrier extracted by QMSA in undoped Al0.25Ga0.75N/GaN heterostructures**
LİŞESİVDİN S. B., ACAR S., Kasap M., Ozcelik S., Gokden S., Ozbay E.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.22, no.5, pp.543-548, 2007 (SCI-Expanded)

XLIII. **High temperature variable-range hopping conductivity in undoped TiO2 thin film**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Mardare D.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.1, no.10, pp.531-533, 2007 (SCI-Expanded)

XLIV. **Optimization of alloy composition, interlayer and barrier thicknesses in AlxGa1-xN/(AlN)/GaN high electron mobility transistors**
LİŞESİVDİN S. B., Yildiz A., Kasap M.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.1, no.9, pp.467-470, 2007 (SCI-

Expanded)

XLV. **Quantitative mobility spectrum analysis for determination of electron and magneto transport properties of Te-doped GaSb**
ACAR S., Kasap M., Isik B., Ozcelik S., Tugluoglu N., Karadeniz S.
Chinese Physics Letters, vol.22, no.9, pp.2363-2366, 2005 (SCI-Expanded)

XLVI. **Temperature-dependent galvanomagnetic measurements on doped InSb and InAs grown by liquid encapsulated czochralski**
Kasap M., ACAR S., Ozcelik S., Karadeniz S., Tugluoglu N.
Chinese Physics Letters, vol.22, no.5, pp.1218-1221, 2005 (SCI-Expanded)

XLVII. **The temperature dependence of electron and magneto transport properties in Te-doped InSb**
Kasap M., ACAR S.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, vol.201, no.14, pp.3113-3120, 2004 (SCI-Expanded)

XLVIII. **Temperature-dependent barrier characteristics of inhomogeneous in/p-Si (100) Schottky barrier diodes**
Tugluoglu N., Karadeniz S., ACAR S., Kasap M.
CHINESE PHYSICS LETTERS, vol.21, no.9, pp.1795-1798, 2004 (SCI-Expanded)

XLIX. **Gaussian distribution of inhomogeneous barrier height in Ag/p-Si (100) Schottky barrier diodes**
ACAR S., Karadeniz S., Tugluoglu N., Selcuk A., Kasap M.
APPLIED SURFACE SCIENCE, vol.233, pp.373-381, 2004 (SCI-Expanded)

L. **Conductivity, Hall and magnetoresistance effect measurements on SIGaAs and InP**
ACAR S., Kasap M.
PHYSICA STATUS SOLIDI A-APPLIED RESEARCH, vol.201, no.7, pp.1551-1557, 2004 (SCI-Expanded)

LI. **Prebreakdown current behaviour in the ionization cell with a semiconductor cathode**
Salamov B., Kasap M., Lebedeva N.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.33, no.17, pp.2192-2195, 2000 (SCI-Expanded)

LII. **The simulation of the two-dimensional Ising model in the presence of an external magnetic field on the Creutz cellular automaton**
Kutlu B., Kasap M., Turan S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.11, no.3, pp.561-572, 2000 (SCI-Expanded)

LIII. **The concentration of currents on the artificial surface inhomogeneities of semiconducting cathodes in ionization cells**
Salamov B., Ozer M., Kasap M., Altindal Ş.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.32, no.6, pp.682-687, 1999 (SCI-Expanded)

LIV. **The temperature and pressure dependence of electron transport in plastically relaxed InxGa1-xAs**
Kasap M., Lancefield D.
PHYSICA STATUS SOLIDI B-BASIC RESEARCH, vol.199, no.2, pp.481-493, 1997 (SCI-Expanded)

LV. **The rapid visualization of resistivity inhomogeneities in high-resistivity semiconductor films**
Salamov B., Civi M., Altindal Ş., Kasap M., BULUR E.
JOURNAL OF INFORMATION RECORDING, vol.23, no.5, pp.437-445, 1997 (SCI-Expanded)

LVI. **Impurity conduction in InxGa1-xAs**
KASAP M., ÖZER M., Çolakoğlu K.
Turkish Journal of Physics, vol.20, no.7, pp.740-746, 1996 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Determination of Structural and Electrical Properties of ZnO Thin Films Grown By Mist-Cvd Method on Sapphire with Different Orientations**
Yayla M., LİŞESİVDİN S. B., KASAP M.
Turkish Physical Society 37th International Physics Congress, Muğla, Turkey, 01 September 2021, pp.236

II. **The Study on Antimony Diffusion in Gallium-Doped Germanium Grown by Chochralski Technique**
Baran V., Çat Y., Akın Sönmez N., Özen Y., Kasap M., Özçelik S.
Turkish Physical Society 33th International Physics Congress, Muğla, Turkey, 6 - 10 September 2017

III. **The Study on Antimony Diffusion in Gallium-doped Germanium Grown by Czochralski Technique**
Baran V., Çat Y., Akın Sönmez N., Özen Y., Kasap M., Özçelik S.
Turkish Physical Society 33th International Physics Congress (TFD33), Muğla, Turkey, 6 - 10 September 2017

IV. **Pt Metal Kümelerin Katkısız SnO2 Sensör Yapılarının Algılama Özelliklerine Etkisi**
Boyalı E., Korkmaz B., Sertel T., Efkere H. İ., Özen Y., Çetin S. Ş., Özçelik S., Kasap M.
22. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 16 December 2016

V. **Germanyum Kızıl Ötesi Optik Pencereler ve Elektromanyetik Girişim**
Çat Y., Baran V., Kasap M., Özçelik S.
22. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 16 December 2016

VI. **Sb Doping Effect on the Electrical Properties of Germanium Single Cyrstals**
BARAN V., ÇAT Y., BOYALI E., ASAR T., KASAP M., ÖZÇELİK S.
2nd International Congres on The World of Technology and Advanced Materials (WITAM2016), Kırşehir, Turkey, 28 September - 02 October 2016

VII. **Sb Katkılı Hacimli Germanyum Tek Kristal Büyütülmesi ve Karakterizasyonu**
Baran V., Çat Y., Asar T., Çetin S. Ş., Kasap M., Özçelik S.
21. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 25 December 2015

VIII. **Electrical, Optical And Structural Properties of SnO2 Thin Films**
BOYALI E., BAŞKÖSE Ü. C., ASAR T., KASAP M., ÖZÇELİK S.
9th International Physics Conference of the Balkan Physical Union – BPU9, İstanbul, Turkey, 24 - 27 August 2015

IX. **Antimon (Sb) Katkılı Germanyum (Ge) Hacimli Tek-Kristalinin Büyütülmesi ve Elektriksel Karakterizasyonu**
BARAN V., ÇAT Y., BOYALI E., ASAR T., KASAP M., ÖZÇELİK S.
20. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 26 December 2014

X. **Investigation of electrical properties of two dimensional hole gas in hybrid InGaN/ZnO heterotructure**
Kutlu E., NARİN P., Atmaca G., LİŞESİVDİN S. B., KASAP M.
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 July 2014, pp.401

XI. **Temperature dependent hall effect studies on the InxGa1 xAs InP MSM infrared photodetectors**
ASAR T., KASAP M., MEMMEDLİ T., ÖZÇELİK S.
XXIII International Scientific and Engineering Conference on Photoelectronics and Night Vision Devices, Moskva, Russia, 28 - 30 May 2014

XII. **Katkısız Ge Tek-Kristal Yarıiletkenlerin Büyütülmesi ve Elektriksel Karakterizasyonları**
BARAN V., BOYALI E., ÇAT Y., KASAP M., ÖZÇELİK S.
19. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 20 December 2013

XIII. **Properties of GaAs/Ge growth by metal organic chemical vapor deposition**
ÇETİN S. Ş., BOSI M., KASAP M., ÖZÇELİK S.
Turkish Physical Society 30th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013

XIV. **The Investigation of Temperature Dependent Electrical Transport Properties of InxGa1-xP/GaAs**
BOYALI E., NARİN P., ATMACA G., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S.
Turkish Physical Society 30th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013

XV. **Scattering Analysis of 2DEG in AlInN/GaN Based Heterostructures With GaN and InGaN Quantum Wells**
NARİN P., ATMACA G., BOYALI E., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S.
Turkish Physical Society 30th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013

XVI. **A Numerical Investigation on Electronic Properties of Two Dimensional Electron Gas in BexZn1-xO/ZnO Heterostructures**
NARİN P., Atmaca G., LİŞESİVDİN B., LİŞESİVDİN S. B., KASAP M.
Turkish Physical Society 30th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013, pp.529

XVII. **Structural and optical properties of double junction InGaP/GaAs solar cell**
ÇETİN S. Ş., KINACI B., ÖZEN Y., BOSI M., ASAR T., KASAP M., MEMMEDLİ T., ÖZÇELİK S.
Turkish Physical Society 30th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013

XVIII. **The structural and morphological characterizations of GaAs/Ge structure**
KINACI B., AKIN SÖNMEZ N., KIZILKAYA K., ÖZEN Y., ASAR T., ÇETİN S. Ş., MEMMEDLİ T., KASAP M., ÖZÇELİK S.
NanoTR-9, Erzurum, Turkey, 24 - 28 June 2013

XIX. **InAlN/GaN Temelli Yuksek Elektron Mobiliteli Transistörlerin (HEMT) Elektron ve Magneto Iletim Ozellikleri**
TUNAY TAŞLI P., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., ÖZBAY E.
ADIM Physics Congress II, Denizli, Turkey, 25 - 27 April 2012, pp.65

XX. **InGaN arka bariyerli AlxGa1-xN/AlN/GaN HEMT yapılarındaki ince filmlerin alaşım oranları ve kalınlıklarının nümerik optimizasyonu**
Kelekçi Ö., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., ÖZBAY E.
17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.17

XXI. **Grafen Flake Üretim Yöntemlerinin Geliştirilmesi**
Elibol K., Kelekçi Ö., Atmaca G., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., ÖZBAY E.
17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.2

XXII. **GaN Tabanlı MESFET Yapıların 2-boyutta Elektriksel Karakteristikleri**
Elibol K., Atmaca G., TUNAY TAŞLI P., LİŞESİVDİN S. B., KASAP M.
17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.34

XXIII. **Eklem Alan Etkili Transistörlerin Elektriksel Karakteristiklerinin Incelenmesi**
Atmaca G., Elibol K., TUNAY TAŞLI P., LİŞESİVDİN S. B., KASAP M.
17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.12

XXIV. **GaAs Tabanlı Bir MOSFET Yapının 2-Boyutta Akım – Gerilim Karakteristiklerinin Incelenmesi**
Kuloğlu A. F., LİŞESİVDİN S. B., KASAP M.
17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.88

XXV. **InGaAs Yarıiletkenin Elektriksel İletkenlik Özellikleri**
Kayhan B., Yıldız A., Altuntaş H., Kasap M., Özçelik S.
16. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 06 November 2009, pp.64

XXVI. **MBE Tekniği ile büyütülen AlGaAs/GaAs Lazer Diyot Yapısının Yapısal, Optik ve Elektriksel Özelliklerinin İncelenmesi**
ÖZÇELİK S., ÇETİN S. Ş., KASAP M., MAMMADOV T.
11. Ulusal Optik, Elektro-Optik ve Fotonik Toplantısı, Turkey, 16 October 2009

XXVII. **Cift kanalli AlGaAs/InGaAs/GaAs tabanli p-HEMT Yapilarinda 1 ve 2-boyutta Schrödinger-Poisson Cozumleri ve Akim-Gerilim Incelemeleri**
Atmaca G., Elibol K., TUNAY TAŞLI P., LİŞESİVDİN S. B., KASAP M.
16. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 06 October 2009, pp.59

XXVIII. **Sicakliga ve manyetik alana bagli Hall olcumlerinin analizi ile DX-merkezi aktivasyon enerjisi hesabi**
LİŞESİVDİN S. B., ALTUNTAŞ H., YILDIZ A., KASAP M., ÖZBAY E., ÖZÇELİK S.
16. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 06 October 2009, pp.9

XXIX. **A Numerical Study on Subband Structure of AlxIn1-xN/GaN-based HEMT Structures with Low-Indium (x>0.82) Barrier Layer**
TUNAY TAŞLI P., LİŞESİVDİN S. B., KASAP M., Elibol K., Atmaca G., ÖZBAY E.
Turkish Physical Society 26th International Physics Congress, Muğla, Turkey, 24 - 27 September 2009, pp.509

XXX. **Determination of Two-Dimensional Electron and Hole Gas Carriers in Al0.88In0.12N/GaN-based Heterostructures Grown by Metal Organic Chemical Vapor Deposition**
TUNAY TAŞLI P., LİŞESİVDİN S. B., YILDIZ A., KASAP M., ÖZBAY E.
Turkish Physical Society 26th International Physics Congress, Muğla, Turkey, 24 - 27 September 2009, pp.510

XXXI. **Optimization of Al-mole Fraction and Layer Thicknesses in AlxGa1-xN/AlN/GaN/AlxGa1-xN/AlN/GaN Double Channel HEMT Structure**
Elibol K., Atmaca G., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S.

Turkish Physical Society 25th International Physics Congress, Muğla, Turkey, 25 - 29 August 2008, pp.454

XXXII. **Small Polaron Transport In Titanium Dioxide Thin Film**
YILDIZ A., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., Mardare D.
Turkish Physical Society 25th International Physics Congress, Muğla, Turkey, 25 - 29 August 2008, pp.133

XXXIII. **Investigation of the Beating Pattern of Shubnikov-De Haas Oscillations and Spin Splitting in AlGaN/AlN/GaN/AlN Heterostructures**
LİŞESİVDİN S. B., Balkan N., Makarovsky O., Patane A., YILDIZ A., Çalışkan M. D., KASAP M., ÖZÇELİK S., ÖZBAY E.
Turkish Physical Society 25th International Physics Congress, Muğla, Turkey, 25 - 29 August 2008, pp.484

XXXIV. **On the conduction mechanism of TiO2**
YILDIZ A., Eker S., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., Mardare D.
8th International Conference on Physics of Advanced Materials, Iasi, Romania, 4 - 07 June 2008, pp.28

XXXV. **Stokes shift in In0.13Ga0.87N epitaxial layer grown by MOVPE**
YILDIZ A., ALTUNTAŞ H., LİŞESİVDİN S. B., Bengi A., KASAP M.
Turkish Physical Society 24th International Physics Congress, Malatya, Turkey, 28 - 31 August 2007, pp.152

XXXVI. **Simulation of the interfacial AlN layer on band structures and carrier densities of AlGaN/GaN HEMT structures**
Liceşivdin S., KASAP M.
6TH International Conference of the Balkan Physical Union, İstanbul, Turkey, 22 August 2006 - 26 August 2007, vol.899, pp.622

XXXVII. **Electrical Conductivity Behaviour in Anatase Phase TiO2**
YILDIZ A., LİŞESİVDİN S. B., ACAR S., KASAP M., Mardare D.
NanoTr3 Conference Proceedings, Ankara, Turkey, 11 - 14 June 2007, pp.151

XXXVIII. **Improved Scattering Analysis of 2DEG carriers in Al0.25Ga0.75N/GaN Heterostructures**
LİŞESİVDİN S. B., YILDIZ A., ACAR S., KASAP M., ÖZÇELİK S., GÖKDEN S., ÖZBAY E.
NanoTr3 Conference Proceedings, Ankara, Turkey, 11 - 14 June 2007, pp.134

XXXIX. **Analysis of ternary InGaN layers grown by atmospheric pressure vertical MOVPE**
YILDIZ A., ÖZTÜRK M. A., KASAP M.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.672

XL. **Mole fraction dependence of mobility in InxGa1-xN alloys**
Yildiz A., LİŞESİVDİN S. B., ACAR S., Kasap M.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.670

XLI. **Activation mechanism in InGaN grown by MOVPE**
Yildiz A., LİŞESİVDİN S. B., ACAR S., Kasap M.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.671

XLII. **Strain calculations from hall measurements in undoped Al0.25Ga0.75N/GaN HEMT structures**
LİŞESİVDİN S. B., Yildiz A., Kasap M., Oezbay E.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.623

XLIII. **Variable-range hopping conductivity in InGaN**
Yildiz A., Kasap M.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.293-294

XLIV. **Analysis of ternary InGaN layers grown by atmospheric pressure vertical MOVPE**
Yildiz A., Ozturk M. K., Kasap M.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.295-296

XLV. **Simulation of the interfacial AlN layer on band structures and carrier densities of AlGaN/GaN HEMT structures**
LİŞESİVDİN S. B., Kasap M.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.622

XLVI. **Two dimensional hole gas (2DHG) formation evidence in AlGaN/GaN/AlN HEMTs**
ACAR S., LİŞESİVDİN S. B., KASAP M.

13. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 November 2006, pp.105

XLVII. **Transport properties of the 2DEG and minority carriers in AlGaN/GaN HEMT Structures grown by MOCVD**
LİŞESİVDİN S. B., ACAR S., KASAP M.
13. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 November 2006, pp.104

XLVIII. **QMSA Analysis and Effects of Extreme Space-Charge Scattering on the Mobility in III-V Systems grown by MBE**
LİŞESİVDİN S. B., ACAR S., KASAP M., ÖZÇELİK S.
Turkish Physical Society 23th International Physics Congress, Muğla, Turkey, 13 - 16 September 2005, pp.1214

XLIX. **Galvanomagnetic measurements of LEC grown Te-doped InSb**
LİŞESİVDİN S. B., Yurdugul U., DEMİREZEN S., ACAR S., KASAP M.
11. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 December 2004, pp.79

L. **Temperature depence of magnetotransport and electrotransport properties of LEC grown S-doped InAs**
KARA İ., LİŞESİVDİN S. B., ACAR S., KASAP M.
11. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 December 2004, pp.67

Supported Projects

Aydın S. Ş., Özçelik S., Kasap M., TÜBİTAK International Bilateral Joint Cooperation Program Project, Growth and Characterization of Epitaxial Ge GaAs and InGaP for photovoltaic and thermophotovoltaic applications, 2012 - 2014
Özçelik S., Kasap M., Aydın S. Ş., TÜBİTAK International Bilateral Joint Cooperation Program Project, Growth and Characterization of Epitaxial Ge GaAs and InGaP for photovoltaic and thermophotovoltaic applications, 2012 - 2014
Aydın S. Ş., Özçelik S., Tataroğlu A., Kasap M., TUBITAK Project, GaAsP İki Renkli Işık Yayan Diyot LED Yapılarının Büyütülmesi ve Karakterizasyonları, 2011 - 2012
Kasap M., Özçelik S., Lişesivdin S. B., Yıldız A., Aydın S. Ş., TÜBİTAK International Bilateral Joint Cooperation Program Project, MOVPE Growth an Characterization of Epitaxial Germanium for Infrared Photovoltaic and Sensor Applications, 2010 - 2012
Özçelik S., Mammadov T., Kasap M., TUBITAK Project, Epitaxial Production and Characterization of Infrared AlGaAs Laser Diode Materials, 2008 - 2010
Yıldız A., Kasap M., TÜBİTAK International Bilateral Joint Cooperation Program Project, Studies on synthesis and characterization of TiO2 thin film nanostructures which have applications in ecological physics, 2008 - 2010

Metrics

Publication: 109
Citation (WoS): 1009
Citation (Scopus): 969
H-Index (WoS): 17
H-Index (Scopus): 17

Non Academic Experience

Gazi Üniversitesi