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International Researcher IDs

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Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Katıhal Fiziği Programı, Turkey 2009 - 2013
Postgraduate, Istanbul University, Institute of Graduate Studies In Sciences, Katıhal Fiziği Programı, Turkey 2006 - 2009
Undergraduate, Istanbul University, Faculty Of Science, Fizik, Turkey 2000 - 2004

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Personal Evolution, Trusted Reviewer, Institute of Physics, 2023
Measurement and Evaluation, Outstanding Reviewer Awards: Nano Express, IOP Publishing: Nano Express, 2023
Entrepreneurship, Outstanding Reviewer Awards: Journal of Physics D, IOP Publishing: Journal of Physics D, 2023
Innovative Product Design, New Frontiers in Optical Technology, Tampere University of Technology, 2011
Vocational Training, Theoretical Techniques in Semiconductor Research, Dokuz Eylül University, 2011
Vocational Training, Material and Physical Characterisation, Institute of Physics Wroclaw University of Technology, 2010
Innovative Product Design, Güneş Gözelerinin Fiziği ve Teknolojisi, Sivas Cumhuriyet Üniversitesi, 2010
Innovative Product Design, Training school on Nitride Semiconductor Metaterials, University of Patras, 2009
Vocational Training, Gravitasyon ve String/M teori, TUBITAK/Feza Gürsey Enstitüsü, 2004
Vocational Training, Gravitasyon ve Kozmoloji, TUBITAK/Feza Gürsey Enstitüsü, 2002

Dissertations

Doctorate, Investigation of low dimensional semiconductor structure with modulation spectroscopy, Istanbul University, Institute of Graduate Studies In Sciences, Fen Fakültesi Bölümü, 2013

Postgraduate, Investigation of quantum well structure with modulation spectroscopy, Istanbul University, Institute of Graduate Studies In Sciences, Fen Fakültesi Bölümü, 2009

Competence In Art, Einstein Gravitasyon Alan Denklemlerinin Reissner-Nordstrom Çözümü, Istanbul University, Faculty of Science, Matematiksel Fizik Anabilim Dalı, 2004

Research Areas

Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, 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 and Administrative Experience

Fen Fakültesi Mal Alımları ve Kabul Komisyonu, Istanbul University, Faculty Of Science, 2016 - Continues
Ders Kurulu Başkanı, Istanbul University, Institute of Graduate Studies In Sciences, 2018 - 2019

Courses

Semiconductor Devices, Doctorate, 2021 - 2022
Physics II, Undergraduate, 2021 - 2022
Physics I, Undergraduate, 2020 - 2021
Katıların Optik Özellikleri, Postgraduate, 2017 - 2018, 2016 - 2017
Yarıiletkenler Fiziği II, Postgraduate, 2017 - 2018
General Physics, Undergraduate, 2018 - 2019
Kathal Fiziği, Undergraduate, 2018 - 2019
Yarıiletkenler Fiziği, Undergraduate, 2017 - 2018, 2016 - 2017
İleri Fizik Uygulamaları, Undergraduate, 2016 - 2017
Kathal Fiziği, Undergraduate, 2017 - 2018
Yarıiletkenler Fiziği I, Postgraduate, 2017 - 2018, 2016 - 2017
Yarıiletkenler Fiziği II, Postgraduate, 2016 - 2017
İleri Fizik Uygulamaları, Undergraduate, 2015 - 2016
Yarıiletkenler Fiziği, Undergraduate, 2015 - 2016
Optoelektronik, Undergraduate, 2016 - 2017
Optoelektronik, Undergraduate, 2015 - 2016
Yarıiletkenler Fiziği, Undergraduate, 2014 - 2015
Optoelektronik, Undergraduate, 2014 - 2015

Advising Theses

Dönmez Ö., Geniş Bant Aralıklı Yarıiletkenlerde Elektriksel Kontak Oluşum Mekanizmaları, Postgraduate, S.Nur(Student), Continues

Dönmez Ö., Bizmut içeren III-V grubu yarıiletkenlerde elektronik transport mekanizmalarının incelenmesi, Doctorate, M.Aydın(Student), 2023

Dönmez Ö., Düşük boyutlu ferromanyetik alaşımların optoelektronik özelliklerinin kristal yönelimlerine bağlı olarak incelenmesi, Postgraduate, S.KERIMOVA(Student), 2021

Jury Memberships

Doctorate, Doctorate, İstanbul Üniversitesi, June, 2021

Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, January, 2020

Doctoral Examination, Doctoral Examination, İstanbul Üniversitesi, December, 2019

Post Graduate, Post Graduate, İstanbul Üniversitesi, May, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Üniversitesi, March, 2019

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Üniversitesi, July, 2017

Post Graduate, Yüksek Lisans, Tez Savunma Juri Üyesi, İstanbul Üniversitesi, Fen Bilimleri Enstitüsü, June, 2016

Designed Lessons

Dönmez Ö., Nano Yapılarda Transport-II: Gerçek düşük boyutlu yapılar, Doctorate, 2023 - 2024

Dönmez Ö., Yarıiletken Aygıtlar, Doctorate, 2023 - 2024

Dönmez Ö., Nano Yapılarda Transport-1: Sanki/Yapay düşük boyutlu Yapılar, Doctorate, 2023 - 2024

Dönmez Ö., Optical Properties of Solids-II, Doctorate, 2022 - 2023

Dönmez Ö., Optical Properties of Solids-I, Doctorate, 2022 - 2023

Dönmez Ö., Yarıiletken tabanlı biyosensörler, Postgraduate, 2019 - 2020

Research Infrastructure Information

Erol A., Kuruoğlu F., Sarcan F., Dönmez Ö., Mutlu S., Advance Lithography Laboratories, June 2015

Erol A., Dönmez Ö., Sarcan F., Kuruoğlu F., Nano and Optoelectronics Research Laboratory, March 2001

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Electron energy relaxation mechanism in n-type $\text{In}_x\text{Ga}_{1-x}\text{As}_1\text{-yBi}_y$ alloys under electric and magnetic fields**
Aydin M., Yilmaz S. N., Erol A., Bork J., Zide J., Donmez Ö.
PHYSICA SCRIPTA, vol.99, pp.105909, 2024 (SCI-Expanded)
- II. **Electric field dependence of the electron drift velocity in n-type $\text{In}_x\text{Ga}_{1-x}\text{As}_1\text{-yBi}_y$ epilayer**
AYDIN M., BORK J., ZIDE J., EROL A., DÖNMEZ Ö.
Physica B: Condensed Matter, vol.685, 2024 (SCI-Expanded)
- III. **Effect of doping on transport properties of InSb epilayers grown by MOCVD and MBE**
Gunes M., Aydın M., Dönmez Ö., Gümüş C., Erol A., Marroquin J., Felix J., Yoshikawa A., Geka H., Kuze N., et al.
Materials Science and Engineering: B, vol.305, 2024 (SCI-Expanded)
- IV. **Characterization of induced quasi-two-dimensional transport in n-type $\text{In}_x\text{Ga}_{1-x}\text{As}_1\text{-yBi}_y$ bulk layer**
AYDIN M., YILMAZ S. N., BORK J., ZIDE J., EROL A., DÖNMEZ Ö.
Applied Physics A: Materials Science and Processing, vol.130, no.7, 2024 (SCI-Expanded)
- V. **Determination of electronic band structure of quaternary ferromagnetic $\text{Ga}_{0.97}\text{-yMn}_{0.03}\text{CryAs}$ epitaxial layers**
Dönmez Ö., Gunes M., Henini M., Erol A.
PHYSICA B-CONDENSED MATTER, vol.665, 2023 (SCI-Expanded)
- VI. **Analysis of mixed optical transitions in dilute magnetic AlAs/GaAs/ GaMnAs quantum wells grown on high substrate index by molecular beam epitaxy**
Kerimova S., Dönmez Ö., Gunes M., Kuruoğlu F., Aydın M., Gümüş C., Erol A.

- VII. **Comprehensively analysis of hot electron transport in as-grown and thermally annealed n-type modulation-doped $\text{Al}_{0.15}\text{Ga}_{0.85}\text{As}/\text{GaAs}_{0.96}\text{Bi}_{0.4}$ quantum well structure**
Dönmez Ö., Aydın M., Mutlu S., Puustinen J., Hilska J., Guina M., Erol A.
Materials Science in Semiconductor Processing, vol.154, 2023 (SCI-Expanded)
- VIII. **High-Field Electron-Drift Velocity in n-Type Modulation-Doped $\text{GaAs}_{0.96}\text{Bi}_{0.04}$ Quantum Well Structure**
Aydın M., Mutlu S., Erol A., Puustinen J., Hilska J., Guina M., Dönmez Ö.
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, vol.16, no.11, 2022 (SCI-Expanded)
- IX. **A quantitative analysis of electronic transport in n- and p-type modulation-doped GaAsBi/AlGaAs quantum well structures**
Dönmez Ö., Erol A., Çetinkaya Ç., Cokduygulular E., Aydın M., Yıldırım S., Puustinen J., Hilska J., Guina M.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.36, no.11, 2021 (SCI-Expanded)
- X. **Temperature-dependent sandwich and in-plane optical characterization of ternary chalcogenide TlSbS_2**
Sarcan F., Aydın M., Kuruoğlu F., Dönmez Ö., Yıldırım S., Erol A.
Materials Science and Engineering B: Solid-State Materials for Advanced Technology, vol.272, 2021 (SCI-Expanded)
- XI. **Photoluminescence characteristic of as-grown and thermally annealed n-and p-type modulation-doped $\text{Ga}_{(0.68)}\text{In}_{(0.32)}\text{N}_{(x)}\text{As}_{(1-x)}/\text{GaAs}$ quantum well structures**
Donmez O., Sarcan F., Erol A., Urgan F., Sari H.
THIN SOLID FILMS, vol.732, 2021 (SCI-Expanded)
- XII. **Determination of the acoustic phonon-hot carriers interaction in n- and p-type modulation-doped GaInNAs/GaAs quantum wells**
Dönmez Ö., Sarcan F., Erol A.
Physica B: Condensed Matter, vol.612, 2021 (SCI-Expanded)
- XIII. **The effect of strain and spatial Bi distribution on the band alignment of GaAsBi single quantum well structure**
Gunes M., Dönmez Ö., Gumus C., Erol A., Alghamdi H., Alhassan S., Alhassni A., Alotaibi S., Schmidbauer M., Galeti H. V. A., et al.
PHYSICA B-CONDENSED MATTER, vol.602, 2021 (SCI-Expanded)
- XIV. **Power loss mechanisms in n-type modulation-doped AlGaAs/GaAsBi quantum well heterostructures**
Dönmez Ö., Aydın M., Ardali S., Yildirim S., Tiras E., Erol A., Puustinen J., Hilska J., Guina M.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.35, 2020 (SCI-Expanded)
- XV. **Electronic transport in n-type modulation-doped AlGaAs/GaAsBi quantum well structures: influence of Bi and thermal annealing on electron effective mass and electron mobility**
Donmez Ö., Aydın M., Ardali S., Yildirim S., Tiras E., Nutku F., Cetinkaya Ç., Cokduygulular E., Puustinen J., Hilska J., et al.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.35, no.2, 2020 (SCI-Expanded)
- XVI. **Effects of Thermal Annealing and Selective Chemical Etching on Structural and Optical Properties of GaAsBi Epilayer with Droplet Systems**
Erucar T., Kara K., Donmez Ö., Erol A., Arnoult A., Fontaine C.
JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY, vol.19, no.12, pp.7846-7852, 2019 (SCI-Expanded)
- XVII. **Characterization of a GaAs/GaAsBi pin solar cell**
Muhammetgulyyev A., Erbas Ö. G., Kinaci B., Donmez Ö., Celebi Y. G., Erol A.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.34, no.8, 2019 (SCI-Expanded)
- XVIII. **Optical properties of $\text{GaAs}_{1-x}\text{Bi}_x/\text{GaAs}$ quantum well structures grown by molecular beam epitaxy on (100) and (311)B GaAs substrates**
Gunes M., Ukelge M. O., Donmez Ö., Erol A., Gumus C., Alghamdi H., Galeti H. V. A., Henini M., Schmidbauer M., Hilska J., et al.

- SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.33, no.12, 2018 (SCI-Expanded)
- XIX. **A study of electric transport in n- and p-type modulation-doped GaInNAs/GaAs quantum well structures under a high electric field**
Sarcan F., Mutlu S., Cokduygular E., Donmez Ö., Erol A., Puustinen J., Guina M.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.33, no.6, 2018 (SCI-Expanded)
- XX. **Optical properties of n- and p-type modulation doped GaAsBi/AlGaAs quantum well structures**
Cetinkaya C., Cokduygular E., Nutku F., Donmez Ö., Puustinen J., Hilska J., Erol A., Guina M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.739, pp.987-996, 2018 (SCI-Expanded)
- XXI. **Characterization of emitted light from travelling Gunn domains in Al_{0.08}Ga_{0.92}As alloy based Gunn devices**
Cetinkaya C., Mutlu S., Donmez Ö., Erol A.
SUPERLATTICES AND MICROSTRUCTURES, vol.111, pp.744-753, 2017 (SCI-Expanded)
- XXII. **Effect of thermal annealing and nitrogen composition on quantum transport in GaInNAs alloy based modulation doped quantum well structures**
Nutku F., Donmez Ö., Cokduygular E., Sarcan F., Kuruoglu F., Mutlu S., Yildirim S., Erol A.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.695, pp.404-409, 2017 (SCI-Expanded)
- XXIII. **Thermal annealing effects on optical and structural properties of GaBiAs epilayers: Origin of the thermal annealing-induced redshift in GaBiAs**
Donmez Ö., Kara K., Erol A., Akalin E., Makhloufi H., Arnoult A., Fontaine C.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.686, pp.976-981, 2016 (SCI-Expanded)
- XXIV. **Optical properties of GaBiAs single quantum well structures grown by MBE**
Donmez Ö., Erol A., Arikani M. C., Makhloufi H., Arnoult A., Fontaine C.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.30, no.9, 2015 (SCI-Expanded)
- XXV. **Quantum oscillations and interference effects in strained n- and p-type modulation doped GaInNAs/GaAs quantum wells**
Sarcan F., Nutku F., Donmez Ö., Kuruoglu F., Mutlu S., Erol A., Yildirim S., Arikani M. C.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.48, no.30, 2015 (SCI-Expanded)
- XXVI. **Negative and positive magnetoresistance in GaInNAs/GaAs modulation-doped quantum well structures**
Nutku F., Donmez Ö., Sarcan F., Erol A., Puustinen J., Arikani M. C., Guina M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.118, no.3, pp.823-829, 2015 (SCI-Expanded)
- XXVII. **Analytic modeling of temperature dependence of 2D carrier mobility in as-grown and annealed GaInNAs/GaAs quantum well structures**
Donmez Ö., Sarcan F., Lisesivdin S. B., Vaughan M. P., Erol A., Gunes M., Arikani M. C., Puustinen J., Guina M.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.29, no.12, 2014 (SCI-Expanded)
- XXVIII. **Anisotropic electron g factor as a probe of the electronic structure of Ga_{Bix}As_{1-x}/GaAs epilayers**
Broderick C. A., Mazzucato S., Carrere H., Amand T., Makhloufi H., Arnoult A., Fontaine C., Donmez Ö., Erol A., Usman M., et al.
PHYSICAL REVIEW B, vol.90, no.19, 2014 (SCI-Expanded)
- XXIX. **Bismuth-induced effects on optical, lattice vibrational, and structural properties of bulk GaAsBi alloys**
Sarcan F., Donmez Ö., Kara K., Erol A., Akalin E., Arikani M. C., Makhloufi H., Arnoult A., Fontaine C.
NANOSCALE RESEARCH LETTERS, vol.9, 2014 (SCI-Expanded)
- XXX. **Magnetotransport study on as-grown and annealed n- and p-type modulation-doped GaInNAs/GaAs strained quantum well structures**
Donmez Ö., Sarcan F., Erol A., Gunes M., Arikani M. C., Puustinen J., Guina M.
NANOSCALE RESEARCH LETTERS, vol.9, 2014 (SCI-Expanded)
- XXXI. **Influence of nitrogen on hole effective mass and hole mobility in p-type modulation doped GaInNAs/GaAs quantum well structures**
Sarcan F., Donmez Ö., Erol A., Gunes M., Arikani M. C., Puustinen J., Guina M.
APPLIED PHYSICS LETTERS, vol.103, no.8, 2013 (SCI-Expanded)

- XXXII. **A study of photomodulated reflectance on staircase-like, n-doped GaAs/Al (x) Ga_{1-x}As quantum well structures**
Donmez Ö., Nutku F., Erol A., Arikan C. M., Ergun Y.
NANOSCALE RESEARCH LETTERS, vol.7, 2012 (SCI-Expanded)
- XXXIII. **Excitation energy-dependent nature of Raman scattering spectrum in GaInNAs/GaAs quantum well structures**
Erol A., Akalin E., Sarcan F., Donmez Ö., Akyuz S., Arikan C. M., Puustinen J., Guina M.
NANOSCALE RESEARCH LETTERS, vol.7, 2012 (SCI-Expanded)
- XXXIV. **An analysis of Hall mobility in as-grown and annealed n- and p-type modulation-doped GaInNAs/GaAs quantum wells**
Sarcan F., Donmez Ö., Gunes M., Erol A., Arikan M. C., Puustinen J., Guina M.
NANOSCALE RESEARCH LETTERS, vol.7, 2012 (SCI-Expanded)
- XXXV. **The role of dislocation-induced scattering in electronic transport in Ga_xIn_{1-x}N alloys**
Donmez Ö., Gunes M., Erol A., Arikan C. M., Balkan N., Schaff W. J.
NANOSCALE RESEARCH LETTERS, vol.7, 2012 (SCI-Expanded)
- XXXVI. **High carrier concentration induced effects on the bowing parameter and the temperature dependence of the band gap of Ga_xIn_{1-x}N**
Donmez Ö., Gunes M., Erol A., Arikan M. C., Balkan N.
JOURNAL OF APPLIED PHYSICS, vol.110, no.10, 2011 (SCI-Expanded)
- XXXVII. **Influence of high electron concentration on band gap and effective electron mass of InN**
Donmez Ö., YILMAZ M., Erol A., ULUĞ B., Arikan M. C., Ulug A., Ajagunna A. O., Iliopoulos E., Georgakilas A.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.248, no.5, pp.1172-1175, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **Effect of Annealing on Electronic Transport in Modulation-doped In_{0.32}Ga_{0.68}As/GaAs Quantum Well Structures**
Rajhi A., Aydın M., Dönmez Ö., Sarcan F., Erol A.
Physics and Astronomy Reports, vol.2, no.1, pp.29-36, 2024 (Peer-Reviewed Journal)
- II. **Optical characterization of Ga_{0.965}Mn_{0.03}Cr_{0.005}As thin film grown by molecular beam epitaxy**
Dönmez Ö., Güneş M., Erol A.
Artubilm: Adana Alparslan Türkeş Bilim ve Teknoloji Üniversitesi Fen Bilimleri Dergisi, vol.4, no.2, pp.44-49, 2021 (Peer-Reviewed Journal)
- III. **Investigating above-bandgap and below-bandgap optical transition in GaBiAs epilayers by photoreflectance spectroscopy**
DÖNMEZ Ö., EROL A.
TURKISH JOURNAL OF PHYSICS, vol.44, no.4, pp.384-393, 2020 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Anomalous Temperature-Dependent Carrier Dynamics and Magnetotransport Properties of InSb Grown by MBE and MOCVD**
AYDIN M., GÜNEŞ M., DÖNMEZ Ö., Henini M., EROL A.
18th International Nanoscience and Nanotechnology Conference, İstanbul, Turkey, 26 - 28 August 2024
- II. **Formation of quasi-two-dimensional electron transport in bulk InGaAsBi layer**
AYDIN M., YILMAZ S. N., EROL A., Bork J., Zide J., DÖNMEZ Ö.
18th International Nanoscience and Nanotechnology Conference, İstanbul, Turkey, 26 - 28 August 2024
- III. **An investigation of the doping effects on the structural properties of the β-Ga₂O₃ (001)**
Yılmaz S. N., Doğan Ü., Sarcan F., Erol A., Kuş E., Nuhoglu D., Taşaltın C., Öztürk Y., Dönmez Ö.

18th International Nanoscience and Nanotechnology Conference, İstanbul, Turkey, 26 - 28 August 2024, pp.42

- IV. **Yüksek Sıcaklığa Dayanıklı GaInP/GaAs heteroeklem Güneş Hücrelerinin Tasarım, Simülasyon ve Karakterizasyonu**
Dolgun M. F., Dönmez Ö.
Fen Fakültesi Fizik Bölümü İFD Poster Şenliği, İstanbul, Turkey, 24 May 2024, pp.1
- V. **Uyumsuz Malzemeler: Temel özellikler ve farklılık yaratan uygulamaları**
Dönmez Ö.
Astronomi ve Fizik Günleri (Boğaziçi Üniversitesi), İstanbul, Turkey, 20 - 21 April 2024
- VI. **Effect of rapid thermal annealing on structural and morphological properties of n-type GaAsBi epilayer**
AYDIN M., DÖNMEZ Ö., EROL A.
16th NANOSCIENCE & NANOTECHNOLOGY CONFERENCE, Ankara, Turkey, 5 - 08 September 2022
- VII. **An electric field induced hot electron transport in GaAsBi alloys**
Aydın M., Mutlu S., Dönmez Ö., Erol A.
NANOTR, Ankara, Turkey, 5 - 08 September 2022, pp.1
- VIII. **OPTICAL AND STRUCTURAL CHARACTERISATION OF TERNARY CHALCOGENIDE TLSEBSE2**
Aydın M., Kuruoğlu F., Sarcan F., Dönmez Ö., Yıldırım S., Erol A.
International Marmara Sciences Congress (Autumn) 2020, Kocaeli, Turkey, 4 - 05 December 2020, pp.49
- IX. **Electronic Transport Properties of Ga_{1-x-y}Mn_xCryAs Films**
ÇOKDUYGULULAR E., DÖNMEZ Ö., EROL A., Güneş M.
Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Muğla, Turkey, 5 - 09 September 2018, pp.277
- X. **Electrical Properties Of Modulation Doped Bi-Containing Highly Mismatched Quantum Well Structures**
ÇETİNKAYA Ç., ÇOKDUYGULULAR E., DÖNMEZ Ö., EROL A., NUTKU F., YILDIRIM S.
Turkish Physical Society 34th International Physics Congress, Muğla, Turkey, 5 - 09 September 2018, vol.34, pp.273
- XI. **EFFECT OF BI ALLOYING ON THE OPTICAL PROPERTIES OF MODULATION DOPED GAASBI/ALGAAS QUANTUM WELL STRUCTURES**
ÇETİNKAYA Ç., ÇOKDUYGULULAR E., NUTKU F., DÖNMEZ Ö., EROL A.
Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Muğla, Turkey, 5 - 09 September 2018, pp.273
- XII. **ELECTRONIC TRANSPORT IN n-type MODULATION DOPED GaInAs/GaAs and GaInNAs/GaAs QUANTUM WELL STRUCTURES**
Rajhi A., Aydın M., ÇOKDUYGULULAR E., ÇETİNKAYA Ç., DÖNMEZ Ö., YILDIRIM S., SARCAN F., EROL A.
Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Muğla, Turkey, 5 - 09 September 2018, pp.161
- XIII. **A study on deep level defect assisted absorption in dilute GaBiAs alloys**
Dönmez Ö., Erol A.
Turkish Physical Society 34. International Physics Congress, Muğla, Turkey, 3 - 07 September 2018, vol.1, no.1, pp.260
- XIV. **A study on deep level defect assisted absorption in dilute GaBiAs alloys**
Dönmez Ö.
Turkish Physical Society 34. International Physics Congress, Muğla, Turkey, 3 - 07 September 2018, vol.1, no.1, pp.260
- XV. **A Comparison Of Characteristics of Heterojunction pin Solar Cells Based On Dilute Bismide And Dilute Nitride Alloys**
Muhammedgulyev A., SARCAN F., Göksel Ö., KINACI B., DÖNMEZ Ö., ÇELEBİ Y. G., EROL A.
International Conference On Condensed Matter And Materials science, Adana, Turkey, 11 - 15 October 2017, pp.25
- XVI. **Optical and Electrical Properties of n- and p-type Modulation Doped GaAs_{1-x}Bix/Al_{0.15}Ga_{0.85}As Single Quantum Well Heterostructure**
ÇETİNKAYA Ç., ÇOKDUYGULULAR E., NUTKU F., DÖNMEZ Ö., Puustinen J., EROL A., Guina M.
International Conference on Condensed Matter and Material Sciences, Adana, Turkey, 11 - 15 October 2017, pp.125
- XVII. **Photoluminescence Study of GaAs/AlGaAs and GaAsBi/AlGaAs Modulation Doped Quantum Well**

Structures

- ÇETİNKAYA Ç., ÇOKDUYGULULAR E., NUTKU F., DÖNMEZ Ö., Puustinen J., EROL A., Guina M.
Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Muğla, Turkey, 6 - 10 September 2017, pp.125
- XVIII. **Optical characterization of n- and p-type modulation doped GaAsBi/AlGaAs quantum well structures**
ÇETİNKAYA Ç., ÇOKDUYGULULAR E., NUTKU F., DÖNMEZ Ö., Puustinen J., EROL A., Guina M.
8. International Workshop on Bismuth-Containing Semiconductors Philipps-Universitat Marburg, Marburg, Germany, 23 - 26 July 2017, pp.125
- XIX. **Characterization Of Heterojunction pin solar Cells Based On Dilute Bismide And Dilute Nitride**
Muhammedgulyev A., SARCAN F., KINACI B., DÖNMEZ Ö., EROL A.
8th International Workshop on Bismuth-Containing Semiconductors, Marburg, Germany, 23 July 2017 - 26 July 2016, pp.97
- XX. **Influence of chemical process on structural and optical properties of as-grown and thermal annealed GaAsBi alloys**
Eruçar T., DÖNMEZ Ö., EROL A.
8th International Workshop on Bismuth-Containing Semiconductors, Marburg, Germany, 23 - 26 July 2017, vol.1, no.1, pp.1
- XXI. **Electronic bandstructure of semiconductor dilute bismide structures**
ERUCAR T., NUTKU F., DÖNMEZ Ö., EROL A.
Turkish Physical Society 32nd International Physics Congress, TPS 2016, Konacik-Bodrum, Turkey, 6 - 09 September 2016, vol.1815
- XXII. **CHARACTERIZATION OF HETERO-STRUCTURE SINGLE PIN JUNCTION SOLAR CELL BASED ON III-N-V AND III-Bi-V ALLOYS**
Muhammetgulyyev A., KINACI B., DÖNMEZ Ö., EROL A.
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- XXIII. **Light Emission from Al_{0.08}Ga_{0.92}As Gunn Device**
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Mobility Activity

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Scholarships

TUBİTAK-BİDEB, TUBİTAK, 2007 - 2008

TUBİTAK-BİDEB, TUBİTAK, 2006 - 2007

Üstün Başarı Bursu, University, 2004 - 2005

Üstün Başarı Bursu, University, 2003 - 2004

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Non Academic Experience

Ekrem BATUK Dersaneleri