

FAHRETTİN SARCAN

DOÇ.DR.

E-posta : fahrettin.sarcan@istanbul.edu.tr

İş Telefonu : +90 212 455 5700 Dahili: 15290

Adres : İstanbul Üniversitesi Fen Fakültesi Fizik Bölümü Nano
ve Optoelektronik Araştırmalar Laboratuvarları 34134

Vezneciler-İstanbul

Uluslararası Araştırmacı ID'leri

ORCID: 0000-0002-8860-4321

Publons / Web Of Science ResearcherID: AAE-7233-2020

ScopusID: 55521747300

Yoksis Araştırmacı ID: 54563



Akademik Unvanlar / Görevler

Doç.Dr. 2022 - Devam Ediyor	İstanbul Üniversitesi, Fen Fakültesi, Fizik Bölümü
Dr.Öğr.Üyesi 2021 - 2022	İstanbul Üniversitesi, Fen Fakültesi, Fizik Bölümü
Araştırmacı 2020 - 2021	University of York, Faculty of Science, Department of Physics
Araştırma Görevlisi Dr. 2014 - 2021	İstanbul Üniversitesi, Fen Fakültesi, Fizik Bölümü
Araştırmacı 2019 - 2019	University of York, Faculty of Science , Department of Physics
Uzman 2013 - 2013	İstanbul Üniversitesi, Fen Fakültesi, Fizik Bölümü

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- A Dual-Channel MoS₂-Based Selective Gas Sensor for Volatile Organic Compounds**
Kuş E., Altındemir G., Bostan Y. K., Taştaltın C., EROL A., Wang Y., SARCAN F.
Nanomaterials, cilt.14, sa.7, 2024 (SCI-Expanded)
- Enhancement of light emission characteristic of a GaAs-based Gunn light emitting diode with a quasi-cavity**
MUTLU S., KALYON G., SARCAN F., ERBAŞ Ö. G., EROL A.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, cilt.169, 2024 (SCI-Expanded)
- Ultraviolet-Ozone Treatment: An Effective Method for Fine-Tuning Optical and Electrical Properties of Suspended and Substrate-Supported MoS₂**
Sarcan F., Armstrong A. J., Bostan Y. K., Kus E., McKenna K. P., Erol A., Wang Y.

NANOMATERIALS, cilt.13, sa.23, 2023 (SCI-Expanded)

4. **Relation between thermal quenching of photoluminescence and negative capacitance on InGaN/GaN multiple quantum wells in p-i-n structure**
ÖZDEMİR O., Baş H., AYARCI KURUOĞLU N., BOZKURT K., Aydın M., SARCAN F., EROL A., Alshehri B., Dogheche K., Dogheche E.
JOURNAL OF LUMINESCENCE, cilt.257, 2023 (SCI-Expanded)
5. **Understanding the impact of heavy ions and tailoring the optical properties of large-area monolayer WS₂ using focused ion beam**
Sarcen F., Fairbairn N., Zotev P., Severs-Millard T., . Gillard D. J., Wang X., Conran B., Heuken M., Erol A., Tartakovskii A., et al.
npj 2D Materials and Applications, cilt.7, sa.23, ss.1-7, 2023 (SCI-Expanded)
6. **Determination of band tail widths in MOCVD grown InGaN single layer within GaN based p-i-n LED structure through photo-induced measurements**
ÖZDEMİR O., BOZKURT K., AYARCI KURUOĞLU N., Baş H., SARCAN F., EROL A., Alshehri B., Dogheche K., Dogheche E.
JOURNAL OF LUMINESCENCE, cilt.255, 2023 (SCI-Expanded)
7. **A novel NiO-based p-i-n ultraviolet photodiode**
Sarcen F., Doğan U., Althumali A., Vasili H. B., Lari L., Kerrigan A., Kuruoğlu F., Lazarov V. K., Erol A.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.934, 2023 (SCI-Expanded)
8. **Surface acoustic wave quasi-Bessel beams generated by symmetrically tilted interdigital transducers**
Uluğ B., Kuruoglu F., Yalcin Y., Erol A., Sarcen F., Şahin A., Çiçek A.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, cilt.55, sa.22, 2022 (SCI-Expanded)
9. **Effects of annealing temperature on a ZnO thin film-based ultraviolet photodetector**
Dogan U., SARCAN F., Koc K. K., KURUOĞLU F., EROL A.
PHYSICA SCRIPTA, cilt.97, sa.1, 2022 (SCI-Expanded)
10. **PREVENTIVE EFFECTS OF MATRIX-METALLOPROTEINASE INHIBITORS ON DENTAL EROSION**
KORUYUCU M., İLİSULU S. C., SARCAN F., KURUOĞLU F., EROL A., SEYMEN F.
FLUORIDE - QUARTERLY REPORTS, cilt.55, sa.2, ss.11, 2022 (SCI-Expanded)
11. **Temperature-dependent sandwich and in-plane optical characterization of ternary chalcogenide TlSbS₂**
Sarcen F., Aydın M., Kuruoğlu F., Dönmez Ö., Yıldırım S., Erol A.
Materials Science and Engineering B: Solid-State Materials for Advanced Technology, cilt.272, 2021 (SCI-Expanded)
12. **Photoluminescence characteristic of as-grown and thermally annealed n-and p-type modulation-doped Ga(0.68)In(0.32)N(x)As(1-x)/GaAs quantum well structures**
Donmez O., Sarcen F., Erol A., Ungan F., Sari H.
THIN SOLID FILMS, cilt.732, 2021 (SCI-Expanded)
13. **Determination of the acoustic phonon-hot carriers interaction in n- and p-type modulation-doped GaInNAs/GaAs quantum wells**
Dönmez Ö., Sarcen F., Erol A.
Physica B: Condensed Matter, cilt.612, 2021 (SCI-Expanded)
14. **Nitrogen induced localised-state ensemble effect on multi quantum well GaInNAs with low indium concentration**
Nordin M. S., Samad M. I. A., SARCAN F., Mohamad K. A., Alias A., Vickers A. J.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, cilt.54, sa.24, 2021 (SCI-Expanded)
15. **In vitro comparison of titanium surface conditioning via boron-compounds and sand-blasting acid-etching**
Zboun M., Arisan V., Topcuoglu N., Kuruoğlu F., Sener L., Sarcen F.
SURFACES AND INTERFACES, cilt.21, 2020 (SCI-Expanded)
16. **ZnO nanoparticles-based vacuum pressure sensor**
SARCAN F.
NANOTECHNOLOGY, cilt.31, sa.43, 2020 (SCI-Expanded)

17. **Ultraviolet Photodetector Based on Mg_{0.67}Ni_{0.33}O Thin Film on SrTiO₃**
SARCAN F., Orchard S., Kuerbanjiang B., Skeparovski A., Lazarov V. K., EROL A.
PHYSICA STATUS SOLIDI-RAPID RESEARCH LETTERS, cilt.14, sa.8, 2020 (SCI-Expanded)
18. **Dilute nitride resonant-cavity light emitting diode**
Sarcan F., Wang Y., Krauss T. F., Erucar T., Erol A.
OPTICS AND LASER TECHNOLOGY, cilt.122, 2020 (SCI-Expanded)
19. **A study on the voltage-dependent response of a GaInNAs-based pin photodetector with a quasi-cavity**
SARCAN F., NUTKU F., Nordin M. S., Vickers A. J., EROL A.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, cilt.33, ss.1-6, 2018 (SCI-Expanded)
20. **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., Cokduygulular E., Donmez Ö., Erol A., Puustinen J., Guina M.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, cilt.33, sa.6, 2018 (SCI-Expanded)
21. **Temporal Response of Dilute Nitride Multi-Quantum-Well Vertical Cavity Enhanced Photodetector**
Nordin M. S., Sarcan F., Güneş M., Boland-Thoms A., Erol A., Vickers A. J.
JOURNAL OF ELECTRONIC MATERIALS, cilt.47, sa.1, ss.655-661, 2018 (SCI-Expanded)
22. **Effect of thermal annealing and nitrogen composition on quantum transport in GaInNAs alloy based modulation doped quantum well structures**
Nutku F., Donmez Ö., Cokduygulular E., Sarcan F., Kuruoglu F., Mutlu S., Yildirim S., Erol A.
JOURNAL OF ALLOYS AND COMPOUNDS, cilt.695, ss.404-409, 2017 (SCI-Expanded)
23. **Characterization of temperature dependent operation of a GaInNAs-based RCEPD designed for 1.3 μ m**
Sarcan F., Nordin M. S., Kuruoglu F., Erol A., Vickers A. J.
SUPERLATTICES AND MICROSTRUCTURES, cilt.102, ss.27-34, 2017 (SCI-Expanded)
24. **Dilute nitride resonant cavity enhanced photodetector with internal gain for the lambda similar to 1.3 μ m optical communications window**
Balkan N., Erol A., Sarcan F., Al-Ghuraibawi L. F. F., Nordin M. S.
SUPERLATTICES AND MICROSTRUCTURES, cilt.86, ss.467-471, 2015 (SCI-Expanded)
25. **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., Arikan M. C.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, cilt.48, sa.30, 2015 (SCI-Expanded)
26. **Negative and positive magnetoresistance in GaInNAs/GaAs modulation-doped quantum well structures**
Nutku F., Donmez Ö., Sarcan F., Erol A., Puustinen J., Arikan M. C., Guina M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, cilt.118, sa.3, ss.823-829, 2015 (SCI-Expanded)
27. **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., Arikan M. C., Puustinen J., Guina M.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, cilt.29, sa.12, 2014 (SCI-Expanded)
28. **Bismuth-induced effects on optical, lattice vibrational, and structural properties of bulk GaAsBi alloys**
Sarcan F., Donmez Ö., Kara K., Erol A., Akalin E., Arikan M. C., Makhoulfi H., Arnoult A., Fontaine C.
NANOSCALE RESEARCH LETTERS, cilt.9, 2014 (SCI-Expanded)
29. **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., Arikan M. C., Puustinen J., Guina M.
NANOSCALE RESEARCH LETTERS, cilt.9, 2014 (SCI-Expanded)
30. **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., Arikan M. C., Puustinen J., Guina M.

APPLIED PHYSICS LETTERS, cilt.103, sa.8, 2013 (SCI-Expanded)

31. **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, cilt.7, 2012 (SCI-Expanded)

32. **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, cilt.7, 2012 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

1. **Dağıtılmış Alt Bragg Dielektrik Yansıtıcı Işık Yayan Diyot**

Sarcan F.

İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, cilt.10, sa.4, ss.1-6, 2020 (Hakemli Dergi)

2. **İstanbul Üniversitesi Gözlemevi Odak Düzlemi Aygıtı Test ve Karakterizasyon Laboratuvarı**

Aliş S., Güver T., Erol A., Ege E., Kay B., Yelkenci F. K., Yeşilyaprak C., Keskin O., Yerli S. K., Sarcan F., et al.

Turkish Journal of Astronomy and Astrophysics, cilt.1, sa.2, ss.755-757, 2020 (Düzenli olarak gerçekleştirilen hakemli kongrenin bildiri kitabı)

Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

1. **Optical and Electrical Properties of MBE Grown CuNiO and MgNiO Alloys**

Doğan Ü., Sarcan F., Althumali A., Kerrigan A., Lazarov V. K., Erol A.

International Graduate Research Symposium – IGRS'22, İstanbul, Türkiye, 1 - 03 Haziran 2022, cilt.1, sa.1, ss.1

2. **Defect engineering of two-dimensional transition metal dichalcogenides**

Sarcan F., Wang Y., Erol A.

International Two-Dimensional Nanomaterials Conference , İstanbul, Türkiye, 25 - 27 Mayıs 2022, ss.1

3. **Few-layer MoTe 2 -based Photodetector**

Sarcan F., Wang Y.

6th INTERNATIONAL APPLIED SCIENCE CONGRESS, Van, Türkiye, 21 - 23 Mayıs 2021, ss.1

4. **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, Türkiye, 4 - 05 Aralık 2020, ss.49

5. **Dilute Nitride-based Resonant Cavity Light Emitter for Optical Communication**

SARCAN F., Wang Y., Krauss T., Eruçar T., EROL A.

42. PIERS Photonics & Electromagnetics Research Symposium, Xiamen, Çin, 17 - 20 Aralık 2019, ss.200

6. **Vertical Cavity based Optoelectronics devices for 1.3 um wavelength applications**

SARCAN F., EROL A.

Intertanional Eurasian Conference on Science, Engineering and Technology, Ankara, Türkiye, 22 - 23 Kasım 2019, ss.1

7. **GaInNAs-based Resonant Cavity Light Emitter and Photodetector for Optical Communication at 1.3 um**

SARCAN F., EROL A., Wang Y., Eruçar T., Krauss T.

IV. Uluslararası Bilimsel ve Mesleki Çalışmalar Kongresi – Mühendislik, Ankara, Türkiye, 7 - 10 Kasım 2019, ss.1

8. **Investigation of the preventive effects of matrix-metalloproteinase inhibitors on dental erosion: In vitro study.**

KORUYUCU M., İlisulu C., SARCAN F., KURUOĞLU F., SEYMEN F.

11th EAPD Interim Seminar and Guideline Workshop, Crete, Yunanistan, 3 - 04 Mayıs 2019, cilt.1, ss.1

9. **GaInNAs-based vertical cavity devices for 1.3 μm applications**
SARCAN F., EROL A.
International Eurasian Conference on Science, Engineering Technology, Ankara, Türkiye, 22 - 23 Kasım 2018, ss.180
10. **Recent Developments at İstanbul University Observatory**
Güver T., Aliş S., Erol A., Ege E., Tüysüz M., Fişek S., Kaptan S., Kay B., Sarcan F., Yelkenci F. K., et al.
34. Uluslararası Fizik Kongresi - TFD, Muğla, Türkiye, 5 - 09 Eylül 2018
11. **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, Türkiye, 5 - 09 Eylül 2018, ss.161
12. **Characterization of GaInNAs-based IR Emitters**
SARCAN F., Eruçar T., EROL A.
Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Muğla, Türkiye, 5 - 09 Eylül 2018, ss.267
13. **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, Türkiye, 11 - 15 Ekim 2017, ss.25
14. **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, Almanya, 23 Temmuz 2017 - 26 Temmuz 2016, ss.97
15. **Comparative Study of Multi Quantum Well Photodetector Characterization Based on GaInNAs for 1 μm Wavelength**
Nordin M. S., Mohmad A. R., SARCAN F., EROL A., Boland-Thoms A., Vickers A. J.
UK Semiconductor, Sheffield, Birleşik Krallık, 12 - 15 Temmuz 2017, ss.71
16. **GaInNAs(sb) Multi Quantum well Vertical Cavity Enhanced Photodetector**
Nordin M. S., SARCAN F., Evans M., EROL A., Boland-Thoms A., Vickers A. J.
Semiconductor And Integrated Opto- Electronics Conference, Cardiff, Birleşik Krallık, 18 - 20 Nisan 2017, ss.103
17. **Comparative Study of Multi Quantum Well GaInNAs Photodetector Characterisation**
Nordin M. S., SARCAN F., EROL A., Boland-Thoms A., Vickers A. J.
The Physics Of Optoelectronic Materials And Devices, Essex, Birleşik Krallık, 27 - 28 Mart 2017, ss.10
18. **Design Issues and Characterization of a GaInNAs-based Resonance Cavity Enhanced Photodetector**
SARCAN F., Nordin M. S., KURUOĞLU F., EROL A., Vickers A. J.
Nanophotonic and Micro/Nano Optic International Conference,, Paris, Fransa, 7 - 09 Aralık 2016, ss.133
19. **INVESTIGATION OF ELECTRONIC TRANSPORT PROPERTIES IN GaInNAs/GaAs QUANTUM WELL STRUCTURES**
NUTKU F., DÖNMEZ Ö., Çokduygulular E., SARCAN F., KURUOĞLU F., MUTLU S., YILDIRIM S., EROL A.
Turkish Physical Society 32nd International Physics Congress, Muğla, Türkiye, 6 - 09 Eylül 2016, cilt.32, ss.129
20. **Investigation of Electronic Transport Properties in GaInNAs/GaAs Quantum Well Structures**
NUTKU F., DÖNMEZ Ö., ÇOKDUYGULULAR E., SARCAN F., KURUOĞLU F., MUTLU S., YILDIRIM S., EROL A.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Muğla, Türkiye, 6 - 09 Eylül 2016, ss.125
21. **Electronic transport properties of p-type GaInNAs/GaAs quantum well structures**
MUTLU S., ÇOKDUYGULULAR E., ÇETİNKAYA Ç., SARCAN F., DÖNMEZ Ö., EROL A.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Muğla, Türkiye, 6 - 09 Eylül 2016, ss.125
22. **GaInNAs Based Resonance Cavity Enhanced Photodetector For Optical Communication Wavelength**
SARCAN F., Nordin M. S., EROL A., Vickers A. J.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Muğla, Türkiye, 6 - 09 Eylül 2016, ss.106
23. **Temperature and electric field dependence of localization in modulation doped GaInNAs/GaAs quantum well structures**
YILDIRIM S., EROL A., SARCAN F., NUTKU F., KURUOĞLU F., DÖNMEZ Ö.

9th International Physics Conference of the Balkan Physical Union-BPU9, İstanbul, Türkiye, 24 - 27 Ağustos 2015, cilt.9, ss.161

24. **Weak Localization and Weak Antilocalization in n- and p-type Modulation Doped GaInNAs/GaAs Quantum Wells**
NUTKU F., SARCAN F., DÖNMEZ Ö., KURUOĞLU F., MUTLU S., EROL A., YILDIRIM S., ARIKAN M. Ç.
İstanbul Üniversitesi Dünya Teknoloji, İnovasyon ve Girişimcilik Konferansı, İSTANBUL, TÜRKİYE, 28-30 Mayıs 2015, İstanbul, Türkiye, 28 - 30 Mayıs 2015, ss.80
25. **Dilute Nitride Resonant Cavity Enhanced Photodetector With Internal Gain For Operation At 1.286 um**
Balkan N., EROL A., SARCAN F., Nordin M. S.
Spie Optics And Optoelectronics, Prague, Çek Cumhuriyeti, 13 - 16 Nisan 2015, ss.48
26. **Magnetoresistance in n- and p-type GaInNAs GaAs Modulation Doped Quantum Well Structures**
NUTKU F., SARCAN F., DÖNMEZ Ö., EROL A., ARIKAN M. Ç.
Türk Fizik Derneği 31.Uluslararası Fizik Kongresi, Muğla, Bodrum., Muğla, Türkiye, 21 - 25 Temmuz 2014, ss.137
27. **Analytic Modeling Of Temperature Dependence of 2D Carrier Mobility In As Grown And Annealed GaInNAs/GaAs Quantum Well Structures**
DÖNMEZ Ö., SARCAN F., Vaughan M., EROL A., Güneş M., ARIKAN M. Ç., Puustinen J., ARIKAN M. Ç.
Türk Fizik Derneği 31. Uluslararası Fizik Kongresi., Muğla, Türkiye, 21 - 25 Temmuz 2014, ss.143
28. **Optical Properties of GaAsBi Ternary Alloy**
SARCAN F., EROL A., ARIKAN M. Ç., Fontaine C.
Novel Gain Materials And Devices Based On III-V-N/Bi Compounds,, İstanbul, Türkiye, 24 - 26 Eylül 2013, ss.41
29. **Investigation of GaBiAs Alloy Using Raman spectroscopy**
AKALIN E., EROL A., SARCAN F., ARIKAN M. Ç., Fontaine C.
Novel Gain Materials And Devices Based On III-V-N/Bi Compounds, İstanbul, Türkiye, 24 - 26 Eylül 2013, ss.47
30. **Thermal Annealing And Nitrogen Induced Effects On Electronic Transport in n- and p-type Modulation Doped GaInNAs GaAs Quantum Well Structures**
DÖNMEZ Ö., SARCAN F., EROL A., Güneş M., ARIKAN M. Ç., Puustinen J., Guina M.
Novel Gain Materials And Devices Based On III-V-N/Bi Compounds, İstanbul, Türkiye, 24 - 26 Eylül 2013, ss.40
31. **Effect of Alloy and Interface Roughness Scatterings On The Carrier Mobility in n- and p-type Modulation Doped GaInNAs/GaAs Quantum Well Structures**
SARCAN F., DÖNMEZ Ö., Vaughan M. P., EROL A., ARIKAN M. Ç., Puustinen J., Guina M.
17th European Molecular Beam Epitaxy Workshop, Levi, Finlandiya, 10 - 13 Mart 2013, ss.246
32. **Investigation Of Nitrogen Dependent In Plane Electron And Hole Effective Masses In GaInNAs/GaAs Quantum Well**
SARCAN F., DÖNMEZ Ö., Vaughan M. P., EROL A., ARIKAN M. Ç., Puustinen J., Guina M.
17th European Molecular Beam Epitaxy Workshop, Levi, Finlandiya, 10 - 13 Mart 2013, ss.300
33. **An Analysis Of Scattering Mechanisms In As Grown And Annealed N And P Type Modulation Doped GaInNAs GaAs Quantum Wells**
SARCAN F., DÖNMEZ Ö., Güneş M., EROL A., ARIKAN M. Ç., Puustinen J., Guina M.
Türk Fizik Derneği 29. Uluslararası Fizik Kongresi., Muğla, Türkiye, 5 - 08 Eylül 2012, ss.139
34. **An Analysis of Hall Mobility In As Grown And Annealed n- and p-type Modulation Doped GaInNAs/GaAs quantum Wells**
SARCAN F., DÖNMEZ Ö., Güneş M., EROL A., ARIKAN M. Ç., Puustinen J., Guina M.
International Conference On Superlattices, Nanostructures and Nanodevices, Dresden, Almanya, 22 - 27 Temmuz 2012, ss.359
35. **A Comprehensive Study Of Optical Characterization of n- and p-type As Grown And Annealed Modulation Doped GaAs GaInNAs Qw Structures**
DÖNMEZ Ö., SARCAN F., EROL A., ARIKAN M. Ç., Ugan F., KAsapoğlu E., Sarı H., Puustinen J., Guina M.
International Conference On Superlattices, Nanostructures and Nanodevices, Dresden, Almanya, 22 - 27 Temmuz 2012
36. **A Comparative Study On Electronic Transport Properties of n- and p-type Modulation Doped GaInNAs**

Gaas And Dilute Nitride GaInNAs/GaAs Quantum Well

Güneş M., DÖNMEZ Ö., SARCAN F., EROL A., ARIKAN M. Ç., Puustinen J., Guina M.

European Materials Research Society, Strazburg, Fransa, 14 - 18 Mayıs 2012, ss.16

37. Effect of Thermal Annealing On Optical And Electronic Transport Properties in n- and p-type Modulation Doped GaInNAs/GaAs Quantum Wells

SARCAN F., DÖNMEZ Ö., Güneş M., EROL A., ARIKAN M. Ç., Puustinen J., Guina M.

European Materials Research Society,, Paris, Fransa, 14 - 18 Mayıs 2012, ss.14

38. Electronic Transport Properties Of The GaInNAs/GaAs p-type As Grown And Annealed Modulation Doped Quantum Well Structures,

EROL A., SARCAN F., Güneş M., ARIKAN M. Ç., Puustinen J., Guina M.

13th International Conference On Transparent Optical Networks, Stocholm, Stocholm, İsveç, 26 Temmuz - 30 Haziran 2011, ss.19

Patent

Sarcan F., Erol A., Dalgaboyu Seçiciliği Yüksek İç Kazançlı Rezonans Kaviteli Fotodedektör, Patent, BÖLÜM G Fizik, Buluşun Tescil No: TR201505193B , Standart Tescil, 2017

Metrikler

Yayın: 72

Atıf (WoS): 193

Atıf (Scopus): 210

H-İndeks (WoS): 10

H-İndeks (Scopus): 10

Kongre ve Sempozyum Katılımı Faaliyetleri

42, Photonics & Electromagnetics Research Symposium, Katılımcı, Xiamen, Çin, 2019

Nanophotonic and Micro/Nano Optic International Conference, Katılımcı, Paris, Fransa, 2016

Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Katılımcı, Muğla, Türkiye, 2016

Türk Fizik Derneği 31.Uluslararası Fizik Kongresi,, Katılımcı, Türkiye, 2014

Novel Gain Materials And Devices Based On III-V-N/Bi Compounds,, Katılımcı, İstanbul, Türkiye, 2013

Türk Fizik Derneği 29. Uluslararası Fizik Kongresi, Katılımcı, Muğla, Türkiye, 2012

International Conference On Superlattices, Nanostructures and Nanodevices, Katılımcı, Dresden, Almanya, 2012

European Materials Research Society, Katılımcı, Strasbourg, Fransa, 2012

"New Frontiers in Optical Technologies", 6th International Summer School,, Katılımcı, Tampere, Finlandiya, 2011

13th International Conference On Transparent Optical Networks, Katılımcı, Stockholm, İsveç, 2011

"Theoretical Techniques in Semicondutor Research" COST Action MP0805 Training School, Katılımcı, İstanbul, Türkiye, 2011

Araştırma Alanları

Metalurji ve Malzeme Mühendisliği, Malzeme Bilimi ve Mühendisliği, Malzeme Karakterizasyonu, Fizik, Yoğun Madde 2:Elektronik Yapı, Elektrik, Manyetik ve Optik Özellikler, Optik özellikler, Yoğun madde spektroskopisi, Yoğun maddede elektronik taşıma, Temel Bilimler, Mühendislik ve Teknoloji