

FAHRETTİN SARCAN

ASSOC. PROF.

Email : fahrettin.sarcan@istanbul.edu.tr

Office Phone : [+90 212 455 5700](tel:+902124555700) Extension: 15290

Address : İstanbul Üniversitesi Fen Fakültesi Fizik Bölümü
Nano ve Optoelektronik Araştırmalar Laboratuvarları 34134
Vezneciler-İstanbul

International Researcher IDs

ORCID: 0000-0002-8860-4321

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

ScopusID: 55521747300

Yoksis Researcher ID: 54563



Learning Knowledge

Doctorate 2013 - 2018	Istanbul University, Fen Bilimleri Ens., Fizik/Katıhal Fiziği Programı, Turkey
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Postgraduate 2010 - 2012	Istanbul University, Fen Bilimleri Ens., Fizik/Katıhal Fiziği Programı, Turkey
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Undergraduate 2006 - 2010	Istanbul University, Faculty Of Science, Fizik, Turkey
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Dissertations

Doctorate, Rezonans Kaviteli ve İç Kazançlı GaInNAs-tabanlı IR Fotodedektör, İstanbul University, Fizik, Katıhal Fiziği, 2018

Postgraduate, Modülasyon katkılı GaInNas/GaAs kuantum kuyusu yapıların optik ve elektriksel özelliklerinin incelenmesi, İstanbul University, Fen Bilimleri, Fizik/Katıhal Fiziği Programı, 2012

Academic Titles / Tasks

Associate Professor 2022 - Continues	Istanbul University, Faculty of Science, Department of Physics
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Assistant Professor 2021 - 2022	Istanbul University, Faculty of Science, Department of Physics
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Researcher 2020 - 2021	University of York, Faculty of Science, Department of Physics
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Research Assistant PhD 2014 - 2021	Istanbul University, Faculty of Science, Department of Physics
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Supported Projects

1. DÖNMEZ Ö., EROL A., SARCAN F., KURUOĞLU F., MUTLU S., KALYON G., Project Supported by Higher Education Institutions, Nano ve Optoelektronik Araştırma Laboratuvarları Optoelektronik Aygıt Üretimi ve Karakterizasyonu Araştırma Altyapısının Sürekliliği ve Geliştirilmesi, 2022 - Continues
2. EROL A., ÖZHAN G., ULUTAŞ D., KURUOĞLU F., SOLAKOĞLU S., AKÇAALAN ALBAY R., CEVHER E., GÜL A., BAYKAL B., GAZİOĞLU C., et al, Project Supported by Higher Education Institutions, İstanbul Üniversitesi Araştırma Laboratuvarlarının Sürekliliği ve Geliştirilmesi, 2021 - Continues
3. SARCAN F., ERBAŞ Ö. G., EROL A., Project Supported by Higher Education Institutions, MgNiO ve CuNiO yarıiletkenlerinin yapısal optik elektriksel ve manyetik karakterizasyonu ve fotodedektör uygulamaları, 2021 - Continues
4. GÜVER T., YELKENCİ F. K., EROL A., ALIŞ S., KAY B., SARCAN F., FİŞEK S., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Doğu Anadolu Gözlemevi Odak Düzlemi Aygıtları ve Adaptif Optik Sistemi, 2015 - Continues
5. Mutlu S., Sarcan F., Erol A., Project Supported by Higher Education Institutions, Sera Gazı Emisyonları için 2B TMD tabanlı Seçici Gaz Sensörlerinin Geliştirilmesi, 2023 - 2025
6. Sarcan F., Erol A., Kalyon G., Project Supported by Higher Education Institutions, 2B Yarıiletken TMD Malzemelerin Büyütme Sonrası Katkılanması ve pn eklem Optoelektronik Aygıt Uygulamaları, 2023 - 2025
7. SARCAN F., EROL A., TUBITAK Project, 2D TMDC/MEMS Hybrid Wavelength Tunable LED, 2021 - 2024
8. Erol A., Sarcan F., TUBITAK Project, ULTRAVİOLE IŞINIM ALGILAMAYA YÖNELİK "SOLAR BLIND" YARI İLETKEN SENSÖR GELİŞTİRİLMESİ, 2021 - 2024
9. SARCAN F., Yarı İletken Tabanlı Ultraviole-Görünür Bölge için Fotodedektör Geliştirilmesi, 2022 - 2023
10. Sarcan F., Erol A., Okcun A., TUBITAK Project, ULTRAVİOLE IŞINIM ALGILAMAYA YÖNELİK "SOLAR BLIND" YARI İLETKEN SENSÖR GELİŞTİRİLMESİ, 2021 - 2023
11. Sarcan F., Aslan B., TUBITAK Project, Strain Engineering of Two Dimensional Materials for Physics and Optoelectronic, 2020 - 2023
12. Wang Y., Sarcan F., Project Supported by Public Organizations in Other Countries, Two-dimensional Optical Amplification for Silicon Technologies, 2018 - 2023
13. ARISAN V., ALZBOUN M., TÜRKER ŞENER L., SARCAN F., KURUOĞLU F., EROL A., TOPCUOĞLU E. N., Project Supported by Higher Education Institutions, Bor İle Modifiye Titanyum İmplant Yüzeylerinde Biyofilm Oluşumu ve Osteoblast Aktivitesinin in vitro Analizi, 2019 - 2022
14. SARCAN F., KRAUSS T. F., WANG Y., Project Supported by Higher Education Institutions, İki Boyutlu Malzemelerin Elektriksel ve Optik Karakterizasyonu ve Optoelektronik Uygulamaları, 2018 - 2021
15. Wang Y., Sarcan F., Krauss T. F., Other International Funding Programs, Enhancing light emission from two-dimensional material/silicon devices, 2019 - 2020
16. SARCAN F., EROL A., Project Supported by Higher Education Institutions, GaInNAs tabanlı ışık yayan aygıt tasarımı ve karakterizasyonu, 2018 - 2020
17. KORUYUCU M., SEYMEYEN F., SARCAN F., İLİSULU S. C., KURUOĞLU F., Project Supported by Higher Education Institutions, Matrixmetalloproteinaz (MMP) inhibitörlerinin dentin erozyonu ve abrazyonu üzerine koruyucu etkisinin invitro olarak değerlendirilmesi, 2017 - 2019
18. EROL A., SARCAN F., KURUOĞLU F., ÇOKDUYGULULAR E., ÇETİNKAYA Ç., DÖNMEZ Ö., NUTKU F., KARA K., AKALIN E., Project Supported by Higher Education Institutions, Characterization of temperature dependent operation of a GaInNAsbased RCEPD designed for 1.3 um, 2018 - 2018
19. EROL A., KARA K., SARCAN F., DÖNMEZ Ö., NUTKU F., YILDIRIM S., MUTLU S., KURUOĞLU F., AKALIN E., Project

Supported by Higher Education Institutions, GaInNAs ve GaAsBi yarıiletkenleri ve bunlara dayalı geliştirilen aygıtların karakterizasyonu, 2017 - 2018

20. EROL A., SARCAN F., Project Supported by Higher Education Institutions, Rezonans kaviteli ve İç kazançlı GaInNAs-tabanlı IR fotodedektör, 2015 - 2018
21. EROL A., SARCAN F., ULUTAŞ D., AKALIN E., BALKAN N., Project Supported by Higher Education Institutions, Optik haberleşme için dikey kaviteli p-i-n dedektör, 2015 - 2018
22. DÖNMEZ Ö., EROL A., YILDIRIM S., AKALIN E., SARCAN F., NUTKU F., KARA K., KINACI B., Project Supported by Higher Education Institutions, Modülasyon katkılı GaBiAs kuantum kuyulu yapıların optik ve elektrik transport özelliklerinin incelenmesi, 2015 - 2017
23. EROL A., SARCAN F., BALKAN N., Project Supported by Higher Education Institutions, 1.3 μm 'de çalışan rezonans kaviteli ve iç kazançlı GaInNAs-tabanlı fotodedektör, 2015 - 2017
24. TUBITAK Project, 1.3 μm 'de Çalışan Rezonans Kaviteli ve İç Kazançlı Galnna-Tabanlı Fotodedektör", TÜBİTAK Projesi, 2014 - 2017
25. YILDIRIM S., DÖNMEZ Ö., EROL A., YAKUT Ş., SARCAN F., ULUTAŞ D., AKALIN E., Project Supported by Higher Education Institutions, Uyumsuz Yarıiletken Alaşımların Optoelektronik Davranışlarının İncelenmesi, 2014 - 2016
26. EROL A., SARCAN F., DÖNMEZ Ö., Project Supported by Higher Education Institutions, GaAsBi alaşımının optik ve elektronik transport özelliklerine büyütme şartları ve Bizmut miktarının etkilerinin incelenmesi, 2013 - 2016
27. Erol A., Sarcan F., Arıkan M. Ç., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, İleri Litografik Araştırmalar Laboratuvarları, 2010 - 2013
28. EROL A., SARCAN F., Project Supported by Higher Education Institutions, Modülasyon Katkılı GaInNAs/GaAs Kuantum Kuyusu Yapıların Optik ve Elektriksel Özelliklerinin İncelenmesi, 2012 - 2012

Published journal articles indexed by SCI, SSCI, and AHCI

1. **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, no.13, pp.1-11, 2023 (SCI-Expanded)
2. **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, vol.257, 2023 (SCI-Expanded)
3. **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, vol.255, 2023 (SCI-Expanded)
4. **Understanding the impact of heavy ions and tailoring the optical properties of large-area monolayer WS₂ using focused ion beam**
Sarcan 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, vol.7, no.23, pp.1-7, 2023 (SCI-Expanded)
5. **A novel NiO-based p-i-n ultraviolet photodiode**
Sarcan F., Doğan U., Althumali A., Vasili H. B., Lari L., Kerrigan A., Kuruoğlu F., Lazarov V. K., Erol A.
Journal of Alloys and Compounds, vol.934, 2023 (SCI-Expanded)
6. **Surface acoustic wave quasi-Bessel beams generated by symmetrically tilted interdigital transducers**
Uluğ B., Kuruoğlu F., Yalcin Y., Erol A., Sarcan F., Şahin A., Çiçek A.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.55, no.22, 2022 (SCI-Expanded)
7. **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, vol.97, no.1, 2022 (SCI-Expanded)

8. **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, vol.55, no.2, pp.11, 2022 (SCI-Expanded)
9. **Temperature-dependent sandwich and in-plane optical characterization of ternary chalcogenide TlSbS₂**
Sarcan F., Aydin 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)
10. **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., Sarcan F., Erol A., Ugan F., Sari H.
THIN SOLID FILMS, vol.732, 2021 (SCI-Expanded)
11. **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)
12. **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, vol.54, no.24, 2021 (SCI-Expanded)
13. **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., Sarcan F.
SURFACES AND INTERFACES, vol.21, 2020 (SCI-Expanded)
14. **ZnO nanoparticles-based vacuum pressure sensor**
SARCAN F.
NANOTECHNOLOGY, vol.31, no.43, 2020 (SCI-Expanded)
15. **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, vol.14, no.8, 2020 (SCI-Expanded)
16. **Dilute nitride resonant-cavity light emitting diode**
Sarcan F., Wang Y., Krauss T. F., Erucar T., Erol A.
OPTICS AND LASER TECHNOLOGY, vol.122, 2020 (SCI-Expanded)
17. **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, vol.33, pp.1-6, 2018 (SCI-Expanded)
18. **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, vol.33, no.6, 2018 (SCI-Expanded)
19. **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, vol.47, no.1, pp.655-661, 2018 (SCI-Expanded)
20. **Characterization of temperature dependent operation of a GaInNAs-based RCEPD designed for 1.3 μm**
Sarcan F., Nordin M. S., Kuruoglu F., Erol A., Vickers A. J.
SUPERLATTICES AND MICROSTRUCTURES, vol.102, pp.27-34, 2017 (SCI-Expanded)
21. **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)

22. **Dilute nitride resonant cavity enhanced photodetector with internal gain for the lambda similar to 1.3 mu m optical communications window**
Balkan N., Erol A., Sarcan F., Al-Ghuraibawi L. F. F., Nordin M. S.
SUPERLATTICES AND MICROSTRUCTURES, vol.86, pp.467-471, 2015 (SCI-Expanded)
23. **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, vol.48, no.30, 2015 (SCI-Expanded)
24. **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, vol.118, no.3, pp.823-829, 2015 (SCI-Expanded)
25. **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, vol.29, no.12, 2014 (SCI-Expanded)
26. **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., Makhloufi H., Arnoult A., Fontaine C.
NANOSCALE RESEARCH LETTERS, vol.9, 2014 (SCI-Expanded)
27. **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, vol.9, 2014 (SCI-Expanded)
28. **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, vol.103, no.8, 2013 (SCI-Expanded)
29. **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)
30. **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)

Articles Published in Other Journals

1. **A quasi-cavity enhanced Light Emitting Diode**
Sarcan F.
İğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.4, pp.1-6, 2020 (Peer-Reviewed Journal)
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, vol.1, no.2, pp.755-757, 2020 (Conference Book)

Refereed Congress / Symposium Publications in Proceedings

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, Turkey, 1 - 03 June 2022, vol.1, no.1, pp.1
2. **Defect engineering of two-dimensional transition metal dichalcogenides**
Sarcan F., Wang Y., Erol A.
International Two-Dimensional Nanomaterials Conference , İstanbul, Turkey, 25 - 27 May 2022, pp.1
3. **Few-layer MoTe₂ -based Photodetector**
Sarcan F., Wang Y.
6th INTERNATIONAL APPLIED SCIENCE CONGRESS, Van, Turkey, 21 - 23 May 2021, pp.1
4. **OPTICAL AND STRUCTURAL CHARACTERISATION OF TERNARY CHALCOGENIDE TL₂SBSE₂**
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
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, China, 17 - 20 December 2019, pp.200
6. **Vertical Cavity based Optoelectronics devices for 1.3 μ m wavelength applications**
SARCAN F., EROL A.
International Eurasian Conference on Science, Engineering and Technology, Ankara, Turkey, 22 - 23 November 2019, pp.1
7. **GaInNAs-based Resonant Cavity Light Emitter and Photodetector for Optical Communication at 1.3 μ m**
SARCAN F., EROL A., Wang Y., Eruçar T., Krauss T.
IV. Uluslararası Bilimsel ve Mesleki Çalışmalar Kongresi – Mühendislik, Ankara, Turkey, 7 - 10 November 2019, pp.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, Greece, 3 - 04 May 2019, vol.1, pp.1
9. **GaInNAs-based vertical cavity devices for 1.3 μ m applications**
SARCAN F., EROL A.
International Eurasian Conference on Science, Engineering Technology, Ankara, Turkey, 22 - 23 November 2018, pp.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, Turkey, 5 - 09 September 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, Turkey, 5 - 09 September 2018, pp.161
12. **Characterization of GaInNAs-based IR Emitters**
SARCAN F., Eruçar T., EROL A.
Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Muğla, Turkey, 5 - 09 September 2018, pp.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, Turkey, 11 - 15 October 2017, pp.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, Germany, 23 July 2017 - 26 July 2016, pp.97

15. **Comparative Study of Multi Quantum Well Photodetector Characterization Based on GaInNAs for 1 μ m Wavelength**
Nordin M. S., Mohmad A. R., SARCAN F., EROL A., Boland-Thoms A., Vickers A. J.
UK Semiconductor, Sheffield, United Kingdom, 12 - 15 July 2017, pp.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, United Kingdom, 18 - 20 April 2017, pp.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, United Kingdom, 27 - 28 March 2017, pp.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, France, 7 - 09 December 2016, pp.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, Turkey, 6 - 09 September 2016, vol.32, pp.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, Turkey, 6 - 09 September 2016, pp.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, Turkey, 6 - 09 September 2016, pp.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, Turkey, 6 - 09 September 2016, pp.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, Turkey, 24 - 27 August 2015, vol.9, pp.161
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Congress and Symposium Activities

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Research Areas

Metallurgical and Materials Engineering, Material science and engineering, Material Characterization, Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Optical Properties, Spectroscopy of Matter, Electronic transport in condensed matter, Natural Sciences, Engineering and Technology