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Biography

He was graduated from Hacettepe University, Department of Physics Engineering in 2003. Then, he completed his M.Sc. studies about electron and magnetotransport properties of AlGaAs/GaAs and InGaAs/GaAs heterostructures at Gazi University, Advanced Technologies Department in 2005. He went to the University of Essex (UK) as a visiting research student for 6 months. He completed his Ph.D. studies about electron and magnetotransport properties, scattering properties of 2D electrons, and hot electron transport of AlGaAs/GaN HEMT structures grown by MOCVD in 2008. He worked as a postdoc at Bilkent University, Nanotechnology Research Center between 2008-2009. He started to work at Gazi University in 2009 as a faculty member. He went to the University of Essex (UK) and Universität Ulm (Germany) as a visiting researcher in 2013 and 2019, respectively. He is still working as a full professor at Gazi University, Physics Department.

Learning Knowledge

Doctorate 2005 - 2008	Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey
Postgraduate 2004 - 2005	Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), Turkey
Undergraduate 1997 - 2003	Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, AlGaIn/GaN temelli yüksek elektron hareketlilikli transistörlerin (HEMT) elektron ve manyeto iletim özellikleri, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2008

Postgraduate, MBE tekniği ile büyütülen InGaAs/GaAs ve AlGaAs yarıiletkenlerinin iletim özellikleri, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2005

Academic Titles / Tasks

Professor 2018 - Continues	Gazi University, Fen Fakültesi, Fizik
Associate Professor 2011 - 2018	Gazi University, Fen Fakültesi, Fizik
Assistant Professor 2009 - 2011	Gazi University, Fen Fakültesi, Fizik

Supported Projects

- Lişesivdin S. B., Lişesivdin B., Project Supported by Higher Education Institutions, MistCVD ile büyütülen p-tipi Cu₂O yarıiletken incefilmler ile Ga₂O₃/Cu₂O p-n kavşak üretimi ve ilgili hesaplamalı çalışmaları, 2022 - 2023
- Lişesivdin S. B., Yıldız A., TUBİTAK Project, Investigation of Growth Behaviors and 2DEG Properties of MgZnO/ZnO Heterostructures grown by USPECVD Method, 2017 - 2020
- Lişesivdin S. B., Tıraş E., TÜBİTAK International Bilateral Joint Cooperation Program Project, Modification of properties of two-dimensional electronic gas using insitu surface passivation of AlGaIn/GaN heterostructures by molecular beam epitaxy, 2014 - 2016
- Lişesivdin S. B., Lişesivdin B., Project Supported by Higher Education Institutions, Mg_xZn_{1-x}O/ZnO ve Be_xZn_{1-x}O/ZnO çokluyapılarını temel alan transistörlerin numerik optimizasyonu, 2012 - 2013
- Özbay E., TUBİTAK Project, SAVS020 Defence Project, 2008 - 2013
- Lişesivdin S. B., Project Supported by Higher Education Institutions, Investigation of the effects of transition metal palladium on electronical, structural and optical properties of graphene nanoribbons, 2012 - 2012
- Kasap M., Özçelik S., Lişesivdin S. B., Yıldız A., Aydın S. Ş., TÜBİTAK International Bilateral Joint Cooperation Program Project, MOVPE Growth and Characterization of Epitaxial Germanium for Infrared Photovoltaic and Sensor Applications, 2010 - 2012
- Özbay E., Lişesivdin S. B., TUBİTAK Project, SAVS Defence Project, 2009 - 2011
- Özçelik S., Mammadov T., Kasap M., TUBİTAK 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
- Özbay E., Lişesivdin S. B., TUBİTAK Project, SAVM005 Defence Project, 2006 - 2009

Awards

- Lişesivdin S. B., TUBA GEBİP Distinguished Young Scientist Award, Türkiye Bilimler Akademisi, February 2017
- Lişesivdin S. B., Prof. Dr. Şevket Erk Outstanding Young Scientist Award, Türk Fizik Derneği, July 2014

Scholarships

Elektriksel uyarmalı dikey kovuklu yarıiletken seyreltik nitrür optik yükselteçlerin elektriksel ve optik incelemeleri, TUBITAK, 2013 - 2013

AlGaIn/GaN Temelli Yüksek Elektron Mobiliteli Transistörlerin (HEMT) Sıcak-Elektron İletim Özelliklerinin İncelenmesi, TUBITAK, 2007 - 2008

Published journal articles indexed by SCI, SSCI, and AHCI

- Influence of pH value of precursor on growth, structural, and optical properties of Cu₂O thin films grown in Mist-CVD**
Kutlu-Narin E., NARİN P., EMRE Ş. B., LİŞESİVDİN S. B.
Physica B: Condensed Matter, vol.681, 2024 (SCI-Expanded)
- The comprehensive investigation of barrier layers on power loss mechanisms in AlGaIn/GaN HEMT structures**
Ardali S., Sonmez F., LİŞESİVDİN S. B., Malin T., Mansurov V., Zhuravlev K., Tiras E.
Materials Science and Engineering: B, vol.300, 2024 (SCI-Expanded)
- Structural and optical properties of mist-CVD grown MgZnO: Effect of precursor solution composition**
Han T., Kutlu-Narin E., NARİN P., LİŞESİVDİN B., LİŞESİVDİN S. B.
Physica B: Condensed Matter, vol.659, 2023 (SCI-Expanded)
- First principles calculations of electronic and optical properties of InSe nanosheets doped with noble metal atoms**
NARİN P., All Abbas J., Kutlu-Narin E., LİŞESİVDİN S. B., Ozbay E.
Computational Materials Science, vol.222, 2023 (SCI-Expanded)
- Effect of sulfur concentration on structural, optical and electrical properties of Cu₂CoSnS₄ absorber film for photovoltaic devices**
Senguler G. Y., Narin E. K., LİŞESİVDİN S. B., Serin T.
Physica B: Condensed Matter, vol.648, 2023 (SCI-Expanded)
- Electronic Properties of a Novel Boron Polymorph: Ogee-Borophene**
LİŞESİVDİN B., LİŞESİVDİN S. B.
Advances in Condensed Matter Physics, vol.2023, 2023 (SCI-Expanded)
- Morphological and optical characterizations of different ZnO nanostructures grown by mist-CVD**
NARİN P., Kutlu-Narin E., Kayral S., Tulek R., Gokden S., Teke A., LİŞESİVDİN S. B.
Journal of Luminescence, vol.251, 2022 (SCI-Expanded)
- A structural analysis of ultrathin barrier (In)AlN/GaN heterostructures for GaN-based high-frequency power electronics**
Narin P., Kutlu-Narin E., Atmaca G., Sarikavak-Lisesivdin B., LİŞESİVDİN S. B., ÖZBAY E.
SURFACE AND INTERFACE ANALYSIS, vol.54, no.5, pp.576-583, 2022 (SCI-Expanded)
- gpaw-tools – higher-level user interaction scripts for GPAW calculations and interatomic potential based structure optimization**
Lişesivdin S. B., Sarikavak-Lisesivdin B.
Computational Materials Science, vol.204, 2022 (SCI-Expanded)
- A novel hot carrier-induced blue light-emitting device**
Mutlu S., Erol A., Arslan E., Ozbay E., Lisesivdin S. B., Tiras E.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.881, 2021 (SCI-Expanded)
- Investigation of Structural and Optical Properties of ZnO Thin Films Grown on Different Substrates by Mist-CVD Enhanced with Ozone Gas Produced by Corona Discharge Plasma**
Kutlu-Narin E., Narin P., LİŞESİVDİN S. B., Sarikavak-Lisesivdin B.
ADVANCES IN CONDENSED MATTER PHYSICS, vol.2021, 2021 (SCI-Expanded)

12. **Growth dynamics of mist-CVD grown ZnO nanoplatelets**
Narin P., Kutlu-Narin E., LİŞESİVDİN S. B.
PHYSICA B-CONDENSED MATTER, vol.614, 2021 (SCI-Expanded)
13. **The effect of barrier layers on 2D electron effective mass in Al_{0.3}Ga_{0.7}N/AlN/GaN heterostructures**
Sonmez F., Ardali S., Lisesivdin S. B., Malin T., Mansurov V., Zhuravlev K., Tiras E.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.33, no.25, 2021 (SCI-Expanded)
14. **Effect of magnesium content and growth temperature on structural and optical properties of USCVD-grown MgZnO films**
Kutlu-Narin E., Narin P., Yildiz A., Lisesivdin S. B.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.127, no.5, 2021 (SCI-Expanded)
15. **The effect of passivation layer, doping and spacer layer on electron-longitudinal optical phonon momentum relaxation time in Al_{0.3}Ga_{0.7}N/AlN/GaN heterostructures**
Sonmez F., Ardali S., Atmaca G., Lisesivdin S. B., Malin T., Mansurov V., Zhuravlev K., Tiras E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.122, 2021 (SCI-Expanded)
16. **General-purpose open-source 1D self-consistent Schrodinger-Poisson Solver: Aestimo 1D**
Hebal H., Koziol Z., Lisesivdin S. B., Steed R.
COMPUTATIONAL MATERIALS SCIENCE, vol.186, 2021 (SCI-Expanded)
17. **Structural parameters and electronic properties of 2D carbon allotrope: Graphene with a kagome lattice structure**
Sarikavak-Lisesivdin B., LİŞESİVDİN S. B., Ozbay E., Jelezko F.
CHEMICAL PHYSICS LETTERS, vol.760, 2020 (SCI-Expanded)
18. **Effects of annealing under different atmospheres on structural and optical properties of USCVD grown ZnO nanostructures**
Kutlu-Narin E., Narin P., Yildiz A., Lisesivdin S. B.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.254, 2020 (SCI-Expanded)
19. **Investigation of electronic and optical properties of wurtzite MgZnO using GGA plus U formalism**
Ibrahim R., NARİN P., Lisesivdin S. B., Ozbay E.
PHILOSOPHICAL MAGAZINE LETTERS, 2019 (SCI-Expanded)
20. **Ab initio study of electronic properties of armchair graphene nanoribbons passivated with heavy metal elements**
NARİN P., Abbas J. M. A., Atmaca G., Kutlu E., LİŞESİVDİN S. B., Ozbay E.
SOLID STATE COMMUNICATIONS, vol.296, pp.8-11, 2019 (SCI-Expanded)
21. **Scattering analysis of ultrathin barrier (< 7nm) GaN-based heterostructures**
NARİN P., Arslan E., Ozturk M., Ozturk M., LİŞESİVDİN S. B., ÖZBAY E.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.125, no.4, 2019 (SCI-Expanded)
22. **Electronic properties of zigzag ZnO nanoribbons with hydrogen and magnesium passivations**
Abbas J. M. A., NARİN P., Kutlu E., LİŞESİVDİN S. B., Ozbay E.
PHYSICA B-CONDENSED MATTER, vol.556, pp.12-16, 2019 (SCI-Expanded)
23. **Electronic properties of graphene nanoribbons doped with zinc, cadmium, mercury atoms**
Omeroglu O., Kutlu E., NARİN P., LİŞESİVDİN S. B., Ozbay E.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.104, pp.124-129, 2018 (SCI-Expanded)
24. **Negative Differential Resistance Observation and a New Fitting Model for Electron Drift Velocity in GaN-Based Heterostructures**
Atmaca G., NARİN P., Kutlu E., Malin T. V., Mansurov V. G., Zhuravlev K. S., LİŞESİVDİN S. B., ÖZBAY E.
IEEE TRANSACTIONS ON ELECTRON DEVICES, vol.65, no.3, pp.950-956, 2018 (SCI-Expanded)
25. **Electronic and optical properties of black phosphorus doped with Au, Sn and I atoms**
Kutlu E., NARİN P., LİŞESİVDİN S. B., Ozbay E.
PHILOSOPHICAL MAGAZINE, vol.98, no.2, pp.155-164, 2018 (SCI-Expanded)
26. **Structural and optical properties of hexagonal ZnO nanostructures grown by ultrasonic sprayCVD**
NARİN P., Kutlu E., Atmaca G., ATILGAN A., Yildiz A., LİŞESİVDİN S. B.

OPTIK, vol.168, pp.86-91, 2018 (SCI-Expanded)

27. **High Figure-of-Merit(V-BR(2)/R-ON) AlGa_N/Ga_N Power HEMT With Periodically C-Doped Ga_N Buffer and AlGa_N Back Barrier**
Lee J., Ju J., Atmaca G., Kim J., Kang S., Lee Y. S., Lee S., Lim J., Kwon H., LİŞESİVDİN S. B., et al.
IEEE JOURNAL OF THE ELECTRON DEVICES SOCIETY, vol.6, no.1, pp.1179-1186, 2018 (SCI-Expanded)
28. **A Comparative Study of AlGa_N and InGa_N Back-Barriers in Ultrathin-Barrier AlN/Ga_N Heterostructures**
Abbas J. M. A., Atmaca G., NARİN P., Kutlu E., Sarikavak-Lisesivdin B., Lisesivdin S. B.
JOURNAL OF ELECTRONIC MATERIALS, vol.46, no.8, pp.5278-5286, 2017 (SCI-Expanded)
29. **The effect of doping in different layers on 2DEG for ultrathin-barrier AlN/Ga_N heterostructures**
Al Abbas J. M., NARİN P., Atmaca G., Kutlu E., Sarikavak-Lisesivdin B., Lisesivdin S. B.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.11, pp.328-331, 2017 (SCI-Expanded)
30. **Electronic structure of beta-Si₃N₄ crystals with substitutional icosagen group impurities**
Kutlu E., NARİN P., Atmaca G., Sarikavak-Lisesivdin B., LİŞESİVDİN S. B., Ozbay E.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.19, pp.278-282, 2017 (SCI-Expanded)
31. **A first principles investigation of the effect of aluminum, gallium and indium impurities on optical properties of beta-Si₃N₄ structure**
NARİN P., Kutlu E., Atmaca G., LİŞESİVDİN S. B., Ozbay E.
OPTIK, vol.147, pp.115-122, 2017 (SCI-Expanded)
32. **The effect of doping in different layers on 2DEG for ultrathin-barrier AlN/Ga_N heterostructures**
Al Abbas J., Narin P., Atmaca G., Kutlu E., Sarikavak-Lisesivdin B., LİŞESİVDİN S. B.
Optoelectronics and Advanced Materials, Rapid Communications, vol.11, pp.328-331, 2017 (SCI-Expanded)
33. **Effect of substitutional As impurity on electrical and optical properties of beta-Si₃N₄ structure**
Kutlu E., NARİN P., Atmaca G., Sarikavak-Lisesivdin B., Lisesivdin S. B., Ozbay E.
MATERIALS RESEARCH BULLETIN, vol.83, pp.128-134, 2016 (SCI-Expanded)
34. **Electronic properties of Li-doped zigzag graphene nanoribbons**
NARİN P., Kutlu E., Sarikavak-Lisesivdin B., Lisesivdin S. B., Ozbay E.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.84, pp.543-547, 2016 (SCI-Expanded)
35. **Two dimensional electron gas in a hybrid Ga_N/InGa_N/ZnO heterostructure with ultrathin InGa_N channel layer**
Atmaca G., NARİN P., Sarikavak-Lisesivdin B., Lisesivdin S. B.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.79, pp.67-71, 2016 (SCI-Expanded)
36. **Scattering analysis of 2DEG mobility in undoped and doped AlGa_N/AlN/Ga_N heterostructures with an in situ Si₃N₄ passivation layer**
Atmaca G., Ardali S., Tiras E., Malin T., Mansurov V. G., Zhuravlev K. S., LİŞESİVDİN S. B.
SOLID-STATE ELECTRONICS, vol.118, pp.12-17, 2016 (SCI-Expanded)
37. **Energy relaxation of hot electrons by LO phonon emission in AlGa_N/AlN/Ga_N heterostructure with in situ Si₃N₄ passivation**
Atmaca G., Ardali S., NARİN P., Kutlu E., LİŞESİVDİN S. B., Malin T., Mansurov V., Zhuravlev K., Tiras E.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.659, pp.90-94, 2016 (SCI-Expanded)
38. **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)
39. **The variation of temperature-dependent carrier concentration and mobility in AlGa_N/AlN/Ga_N heterostructure with Si₃N₄ passivation**
Ardali S., Atmaca G., LİŞESİVDİN S. B., Malin T., Mansurov V., Zhuravlev K., Tiras E.
PHYSICA STATUS SOLIDI B-BASIC SOLID STATE PHYSICS, vol.252, no.9, pp.1960-1965, 2015 (SCI-Expanded)
40. **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)

41. **Energy Relaxation of Electrons in InGaN Quantum Wells**
Sarıkavak-Lisesivdin B., LİŞESİVDİN S. B., Balkan N., Atmaca G., NARİN P., Cakmak H., ÖZBAY E.
METALLURGICAL AND MATERIALS TRANSACTIONS A-PHYSICAL METALLURGY AND MATERIALS SCIENCE, no.4, pp.1565-1569, 2015 (SCI-Expanded)
42. **Electron Transport Properties of Two-Dimensional Electron Gas in $\text{Be}_{0.5}\text{Zn}_{0.5}\text{O}/\text{ZnO}$ Heterostructures**
Atmaca G., Narin P., Lisesivdin S. B., Kasap M., Sarıkavak-Lisesivdin B.
PHILOSOPHICAL MAGAZINE, vol.95, no.1, pp.79-89, 2015 (SCI-Expanded)
43. **Numerical investigation of the 2DEG properties of AlGaN/AlN/GaN HEMT structures with InGaN/GaN MQW back-barrier structure**
Atmaca G., Tasli P., Karakoc G., Yazbahar E., LİŞESİVDİN S. B.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.65, pp.110-113, 2015 (SCI-Expanded)
44. **Analytic modeling of temperature dependence of 2D carrier mobility in as-grown and annealed GaInNAs/GaAs quantum well structures**
DÖNMEZ Ö., SARCAN F., LİŞESİVDİN 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)
45. **Extraction and scattering analyses of 2D and bulk carriers in epitaxial graphene-on-SiC structure**
LİŞESİVDİN S. B., Atmaca G., Arslan E., Cakmakyapan S., Kazar O., Butun S., Ul-Hassan J., Janzen E., Ozbay E.
PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.63, pp.87-92, 2014 (SCI-Expanded)
46. **SiC Substrate Effects on Electron Transport in the Epitaxial Graphene Layer**
Arslan E., Cakmakyapan S., Kazar O., Butun S., LİŞESİVDİN S. B., CİNEL N. A., ERTAŞ G., Ardali S., Tiras E., Jawad-ul-Hassan J., et al.
ELECTRONIC MATERIALS LETTERS, vol.10, no.2, pp.387-391, 2014 (SCI-Expanded)
47. **Optical gain in 1.3- μm electrically driven dilute nitride VCISOAs**
LİŞESİVDİN S. B., Khan N. A., Mazzucato S., Balkan N., Adams M. J., Korpajarvi V., Guina M., Mezosi G., Sorel M.
NANOSCALE RESEARCH LETTERS, vol.9, 2014 (SCI-Expanded)
48. **A numerical study on subband structure of $\text{In}_x\text{Al}_{1-x}\text{N}/\text{GaN}$ -based HEMT structures with low-indium ($x < 0.10$) barrier layer**
Elibol K., Atmaca G., Tasli P., LİŞESİVDİN S. B.
SOLID STATE COMMUNICATIONS, vol.162, pp.8-12, 2013 (SCI-Expanded)
49. **First-principles calculations of Pd-terminated symmetrical armchair graphene nanoribbons**
Kuloglu A. F., Sarıkavak-Lisesivdin B., Lisesivdin S. B., Ozbay E.
COMPUTATIONAL MATERIALS SCIENCE, vol.68, pp.18-22, 2013 (SCI-Expanded)
50. **The effect of $\text{In}_x\text{Ga}_{1-x}\text{N}$ back-barriers on the dislocation densities in $\text{Al}_{0.31}\text{Ga}_{0.69}\text{N}/\text{AlN}/\text{GaN}/\text{In}_x\text{Ga}_{1-x}\text{N}/\text{GaN}$ heterostructures ($0.05 \leq x \leq 0.14$)**
Sarıkavak-Lisesivdin B., Lisesivdin S. B., Ozbay E.
CURRENT APPLIED PHYSICS, vol.13, no.1, pp.224-227, 2013 (SCI-Expanded)
51. **Temperature dependent energy relaxation time in AlGaN/AlN/GaN heterostructures**
Tiras E., Celik O., Mutlu S., Ardali S., LİŞESİVDİN S. B., ÖZBAY E.
SUPERLATTICES AND MICROSTRUCTURES, vol.51, no.6, pp.733-744, 2012 (SCI-Expanded)
52. **Determination of the LO phonon energy by using electronic and optical methods in AlGaN/GaN**
Celik O., Tiras E., Ardali S., LİŞESİVDİN S. B., ÖZBAY E.
CENTRAL EUROPEAN JOURNAL OF PHYSICS, vol.10, no.2, pp.485-491, 2012 (SCI-Expanded)
53. **Ab initio study of Ru-terminated and Ru-doped armchair graphene nanoribbons**
Sarıkavak-Lisesivdin B., Lisesivdin S. B., Ozbay E.
MOLECULAR PHYSICS, vol.110, no.18, pp.2295-2300, 2012 (SCI-Expanded)
54. **Numerical optimization of In-mole fractions and layer thicknesses in $\text{Al}_x\text{Ga}_{1-x}\text{N}/\text{AlN}/\text{GaN}$ high electron mobility transistors with InGaN back barriers**
Kelekci O., LİŞESİVDİN S. B., Ozcelik S., Ozbay E.
Physica B: Condensed Matter, vol.406, no.8, pp.1513-1518, 2011 (SCI-Expanded)

55. **Grain Boundary Related Electrical Transport in Al-rich Al_xGa_{1-x}N 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)
56. **Improvement of breakdown characteristics in AlGa_N/Ga_N/Al_xGa_{1-x}N HEMT based on a grading Al_xGa_{1-x}N buffer layer**
Yu H., LİŞESİVDİN S. B., Bolukbas B., Kelekci O., Ozturk M. K., ÖZÇELİK S., Caliskan D., Ozturk M., Cakmak H., Demirel P., et al.
PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, vol.207, no.11, pp.2593-2596, 2010 (SCI-Expanded)
57. **Numerical simulation of novel ultrathin barrier n-GaN/InAlN/AlN/GaN HEMT structures: Effect of indium-mole fraction, doping and layer thicknesses**
Tasli P., Sarikavak B., Atmaca G., Elibol K., Kuloglu A. F., Lisesivdin S. B.
PHYSICA B-CONDENSED MATTER, vol.405, no.18, pp.4020-4026, 2010 (SCI-Expanded)
58. **Double subband occupation of the two-dimensional electron gas in In_xAl_{1-x}N/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)
59. **Scattering analysis of two-dimensional electrons in AlGa_N/Ga_N with bulk related parameters extracted by simple parallel conduction extraction method**
Lİşesivdin S. B., Yildiz A., Balkan N., Kasap M., Ozcelik S., Ozbay E.
JOURNAL OF APPLIED PHYSICS, vol.108, no.1, 2010 (SCI-Expanded)
60. **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)
61. **Determination of the critical indium composition corresponding to the metal-insulator transition in In_xGa_{1-x}N (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)
62. **Mobility limiting scattering mechanisms in nitride-based two-dimensional heterostructures with the InGa_N channel**
Gokden S., Tulek R., Teke A., Leach J. H., Fan Q., Xie J., Ozgur U., Morkoc H., LİŞESİVDİN S. B., Ozbay E.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.25, no.4, 2010 (SCI-Expanded)
63. **Analysis of defect related optical transitions in biased AlGa_N/Ga_N 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)
64. **Investigation of low-temperature electrical conduction mechanisms in highly resistive Ga_N 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)
65. **Well parameters of two-dimensional electron gas in Al_{0.88}In_{0.12}N/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)
66. **Contributions of impurity band and electron-electron interactions to magnetoconductance in AlGa_N**
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)
67. **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)
68. **Effect of various pseudomorphic AlN layer insertions on the electron densities of two-dimensional**

electron gas in lattice-matched $\text{In}_{0.18}\text{Al}_{0.82}\text{N}/\text{GaN}$ based heterostructures

LİŞESİVDİN S. B., Ozbay E.

OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.3, no.9, pp.904-909, 2009 (SCI-Expanded)

69. **The effect of AlN interlayer thicknesses on scattering processes in lattice-matched AlInN/GaN two-dimensional electron gas heterostructures**
Teke A., Goekden S., Tuelek R., Leach J. H., Fan Q., Xie J., Oezgur U., Morkoc H., LİŞESİVDİN S. B., Ozbay E.
NEW JOURNAL OF PHYSICS, vol.11, 2009 (SCI-Expanded)
70. **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)
71. **Non-adiabatic small polaron hopping conduction in Nb-doped TiO_2 thin film**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Mardare D.
PHYSICA B-CONDENSED MATTER, vol.404, pp.1423-1426, 2009 (SCI-Expanded)
72. **Large zero-field spin splitting in AlGaN/AlN/GaN/AlN heterostructures**
LİŞESİVDİN S. B., Balkan N., Makarovskiy 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)
73. **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)
74. **Electronic transport in n- and p-type modulation doped $\text{Ga}_{x-1}\text{In}_x\text{N}_{1-y}\text{As}_y/\text{GaAs}$ quantum wells**
Sun Y., Balkan N., Aslan M., LİŞESİVDİN S. B., Carrere H., Arikan M. C., Marie X.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.21, no.17, 2009 (SCI-Expanded)
75. **A simple parallel conduction extraction method (SPCEM) for MODFETs and undoped GaN-based HEMTs**
LİŞESİVDİN S. B., Balkan N., Ozbay E.
MICROELECTRONICS JOURNAL, vol.40, no.3, pp.413-417, 2009 (SCI-Expanded)
76. **Anomalous temperature dependence of the electrical resistivity in $\text{In}_{0.17}\text{Ga}_{0.83}\text{N}$**
Yildiz A., LİŞESİVDİN S. B., Kasap M., Bosi M.
SOLID STATE COMMUNICATIONS, vol.149, pp.337-340, 2009 (SCI-Expanded)
77. **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)
78. **Growth parameter investigation of $\text{Al}_{0.25}\text{Ga}_{0.75}\text{N}/\text{GaN}/\text{AlN}$ 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)
79. **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)
80. **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., Ozbay E.
THIN SOLID FILMS, vol.516, no.8, pp.2041-2044, 2008 (SCI-Expanded)
81. **Stokes shift and band gap bowing in $\text{In}_x\text{Ga}_{1-x}\text{N}$ ($0.060 \leq x \leq 0.105$) 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)

82. **Self-consistent scattering analysis of Al_{0.2}Ga_{0.8}N/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)
83. **The effect of strain relaxation on electron transport in undoped Al_{0.25}Ga_{0.75}N/GaN heterostructures**
 LİŞESİVDİN S. B., Yildiz A., ACAR S., Kasap M., Oezcelik S., Ozbay E.
 PHYSICA B-CONDENSED MATTER, vol.399, no.2, pp.132-137, 2007 (SCI-Expanded)
84. **Electron transport in Ga-rich In_xGa_{1-x}N 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)
85. **Electronic transport characterization of AlGa_xN/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)
86. **Scattering analysis of 2DEG carrier extracted by QMSA in undoped Al_{0.25}Ga_{0.75}N/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)
87. **Optimization of alloy composition, interlayer and barrier thicknesses in Al_xGa_{1-x}N/(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)
88. **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)

Books & Book Chapters

1. **Nanoteknoloji Devrimini Anlamak**
 LİŞESİVDİN B., LİŞESİVDİN S. B.
 Nobel Yayinevi, 2014

Refereed Congress / Symposium Publications in Proceedings

1. **Sigma Vector Calculations in Nodal Aberration Theory (NAT) and its Experimental Investigations**
 Yesiltepe M., Arpa E., Ekinci M., LİŞESİVDİN S. B., Karci O.
 10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023
2. **Quantum Materials Science and NV-center-based systems for future Quantum Computers**
 LİŞESİVDİN S. B.
 2nd International Conference on Informatics and Computer Science, Ankara, Turkey, 01 December 2022
3. **Germanene: DFT investigation of Electronic and Optical Properties changing with Au and Cu doping**
 Han T., LİŞESİVDİN B., LİŞESİVDİN S. B.
 9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 September 2022, pp.170
4. **Doped Tin Carbide (SnC) Based Nanostructure for Applications In Nanoelectronics**

Ansari M. T., NARİN P., LİŞESİVDİN S. B., LİŞESİVDİN B., ÖZBAY E.

9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 September 2022, pp.150

5. **MgZnO Thin Films by Mist-CVD Grown: Structural and Optical Properties**

Kutlu-Narin E., NARİN P., LİŞESİVDİN S. B.

9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 September 2022, pp.100

6. **Density Functional Theory Investigation of the Interaction of CO molecule with CuO Nanolayer Defect Centers**

Turhan P., LİŞESİVDİN S. B.

9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 September 2022, pp.148

7. **Multi-Code, Low-Barrier Python Toolkit For MD/DFT Studies**

LİŞESİVDİN B., LİŞESİVDİN S. B.

9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 September 2022, pp.104

8. **Growth and Structural Properties of ZnO Materials by Mist CVD Enhanced by Corona Discharge Plasma**

NARİN P., Kutlu-Narin E., LİŞESİVDİN S. B.

9th International Conference on Materials Science and Nanotechnology for Next Generation, Ankara, Turkey, 22 September 2022, pp.86

9. **Sigma Vectors in Nodal Aberration Theory for High-Precision Telescope Alignment**

Yeşiltepe M., Arpa E., LİŞESİVDİN S. B., KARCI Ö.

Fotonik 2022, Ankara, Turkey, 09 September 2022

10. **gpaw-tools: UI/GUI scripts for GPAW software**

LİŞESİVDİN B., LİŞESİVDİN S. B.

2022 Workshop on Recent Developments in Electronic Structure (ES22), New York, United States Of America, 31 May 2022

11. **DFT Investigation of Electronic and Optical Properties of Silver Doped Germanene**

Han T., LİŞESİVDİN B., LİŞESİVDİN S. B.

Turkish Physical Society 37th International Physics Congress, Muğla, Turkey, 01 September 2021, pp.240

12. **A First Principle Calculations of Monolayer InSe Impurity with Pd, Pt, Ag, and Au**

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LİŞESİVDİN B., LİŞESİVDİN S. B., ÖZBAY E., Jelezko F.

Quantum Optics and Informatics Meeting – 4 (Kobit 4), İzmir, Turkey, 14 - 15 May 2020

16. **Spin-coherence time measurements of NV- centers in ¹⁵N, ¹⁵N₂ and O implanted diamond**

LİŞESİVDİN S. B., Lang J., Jelezko F.

Quantum Optics and Informatics Meeting – 4 (Kobit 4), İzmir, Turkey, 14 - 15 May 2020

17. **Optical and Structural Properties of ZnO Grown by Mist CVD Using Different Precursor Molarity**

NARİN P., Kutlu E., LİŞESİVDİN S. B.

20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.28

18. **First Principle Study of ZnO Nanoribbon Passivated with H and Mg**
 Abbas J. M. A., NARİN P., Kutlu E., LİŞESİVDİN S. B., ÖZBAY E.
 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.37
19. **Growth of ZnO Nanostructures on Sapphire by Ultrasonic Spray CVD**
 NARİN P., Kutlu E., LİŞESİVDİN S. B.
 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.29
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 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.31
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 Atmaca G., NARİN P., Kutlu E., Ardalı Ş., TIRAŞ E., Malin T. V., Mansurov V. G., Zhuravlev K. S., LİŞESİVDİN S. B., ÖZBAY E.
 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.68
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 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.30
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 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.78
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 İbrahim R., NARİN P., LİŞESİVDİN S. B., ÖZBAY E.
 20. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 14 September 2018, pp.14
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 Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, Muğla, Turkey, 5 - 09 September 2018, pp.475
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 haliloglu m. t., LİŞESİVDİN S. B., ÖZBAY E.
 1st Light and Light-Based Technologies Workshop, Ankara, Turkey, 15 May - 15 August 2018, pp.51
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 EROL A., MUTLU S., LİŞESİVDİN S. B., TIRAŞ E.
 International Conference on Condensed Matter and Materials Science, 11 - 15 October 2017
29. **A First Principle Investigations of The Electronic Structures For ZGNRs Terminated With Zn, Cd and H**
 J. M. A. A., Narin P., LİŞESİVDİN S. B., ÖZBAY E.
 Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.587
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 Turkish Physical Society 33rd International Physics Congress, Muğla, Turkey, 6 - 10 September 2017, pp.648
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The Physics of Optoelectronic Materials and Devices, 27 - 28 March 2017

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Al Abbas J. M., Atmaca G., Narin P., Kutlu E., LİŞESİVDİN B., LİŞESİVDİN S. B.

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18. Ulusal Optik, Elektro-optik ve Fotonik Çalıştayı, Ankara, Turkey, 23 September 2016

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18. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Ankara, Turkey, 23 September 2016, vol.72

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18. Ulusal Optik, Elektro-optik ve Fotonik Çalıştayı, Ankara, Turkey, 23 September 2016

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18. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştayı, Turkey, 23 September 2016, vol.50

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ADIM Fizik Günleri V, Eskişehir, Turkey, 21 - 23 April 2016

46. **Ultrathin Bariyerli AlN GaN Çoklu Yapılarda Farklı Katmanların 2BEG Üzerine Etkisi**

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Atmaca G., Narin P., Kutlu E., LİŞESİVDİN S. B.

IX. Uluslararası Balkan Fizik Birliği Konferansı, 24 - 27 August 2015

50. **Power loss Mechanisms in Surface Passivated AlGa_N Al_N Ga_N Heterojunctions**

TIRAŞ E., Atmaca G., LİŞESİVDİN S. B., Ardalı Ş., Malin T., Mansurov V., Zhuravlev K.

OSA 2015 Conference on Lasers and Electro-Optics Pacific Rim, Busan, South Korea, 24 - 28 August 2015

51. **The Effect of in situ Si₃N₄ Passivation on 2DEG Quantum Well Parameters in AlGa_N Ga_N Heterostructures**

LİŞESİVDİN S. B., Atmaca G., Ardalı Ş., TIRAŞ E., Malin T., Mansurov V., Zhuravlev K.

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52. **The effect of in situ Si₃N₄ passivation on hot electron energy relaxation rates in AlGa_N Ga_N Hetrostructures**

Atmaca G., Malin T., Kutlu E., Ardalı Ş., Narin P., Mansurov V., LİŞESİVDİN B., LİŞESİVDİN S. B., TIRAŞ E., Zhuravlev K.
Ga_N In_N Al_N 2015, 23 - 25 May 2015

53. **The Longitudinal Optical Phonon Energy in Passivated AlGa_N Al_N Ga_N**

Tıraş T., Ardalı Ş., Atmaca G., LİŞESİVDİN S. B., Malin T., Mansurov V., Zhuravlev K., TIRAŞ E.

E-MRS 2015 Spring Meeting, 11 - 15 May 2015

54. **Surface Passivation Effect in AlGa_N Al_N Ga_N Heterostructure**

Ardalı Ş., Atmaca G., LİŞESİVDİN S. B., Malin T., Mansurov V., Zhuravlev K., TIRAŞ E.

E-MRS 2015 Spring Meeting, 11 - 15 May 2015

55. **Investigation of Optical Properties of the Si₃N₄ structure doped with some Group IIIA Elements**

Narin P., Kutlu E., Atmaca G., LİŞESİVDİN B., LİŞESİVDİN S. B.

1st International Conference on Organic Electronic Material Technologies (OEMT'2015), 25 - 28 March 2015

56. **Investigation of Optical Properties of the Beta Si₃N₄ Structure doped with some group IIIA Elements**

Narin P., Kutlu E., Atmaca G., LİŞESİVDİN B., LİŞESİVDİN S. B.

1. Uluslararası Organik Elektronik Malzeme Teknolojileri Konferansı, 25 - 28 March 2015

57. **First Principle Calculations of Electrical Properties of Insulator Wurtzite Beta Si₃N₄ with the Aluminum Indium and Gallium Impurities**

Kutlu E., Narin P., Atmaca G., LİŞESİVDİN B., LİŞESİVDİN S. B.

1st International Conference on Organic Electronic Material Technologies (OEMT'2015), 25 - 28 March 2015

58. **First Principle Calculations of Electrical Properties of Insulator Wurtzite the Si₃N₄ with the Aluminum Indium and Gallium Impurities**

Kutlu E., Narin P., Atmaca G., LİŞESİVDİN B., LİŞESİVDİN S. B.

1. Uluslararası Organik Elektronik Malzeme Teknolojileri Konferansı, 25 - 28 March 2015

59. **The Effect of In Situ Si₃N₄ Passivation on Hot Electron energy Relaxation Rates in AlGa_N Ga_N Heterostructures**

Atmaca G., Malin T., Kutlu E., Ardalı Ş., Narin P., Mansurov V., LİŞESİVDİN B., LİŞESİVDİN S. B., TIRAŞ E., Zhuravlev K.

10th All-Russian Conference Gallium, aluminum and indium nitrides, 23 - 25 March 2015

60. **Implementation of Simple Parallel Conduction Extraction Method (SPCEM) for seperating 2D and 3D conduction channels in semiconductor structures**

LİŞESİVDİN S. B.

Конференция И Школа Молодых Учёных По Актуальным Проблемам Физики Полупроводниковых Структур, Novosibirsk, Russia, 15 September 2014, pp.25

61. **Ab initio study of oxygen and arsenic impurities on non-linear optical properties of β-Si₃N₄ material**

Kutlu E., NARİN P., Atmaca G., LİŞESİVDİN B., LİŞESİVDİN S. B.

Конференция И Школа Молодых Учёных По Актуальным Проблемам Физики Полупроводниковых Структур, Novosibirsk, Russia, 15 September 2014, pp.77

62. **Investigation of the effect of the arsenic impurity on the electronic and optical properties of β -Si₃N₄ dielectric material**
LİŞESİVDİN S. B., Kutlu E., NARİN P., Atmaca G., LİŞESİVDİN B.
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 July 2014, pp.402
63. **Influence of interface traps on device performance of AlGa_N/Ga_N HEMTS with Si₃N₄ passivation**
Atmaca G., Evrensel A. E., LİŞESİVDİN S. B.
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 July 2014, pp.371
64. **Investigation of electrical properties of two dimensional hole gas in hybrid InGa_N/ZnO heterostructure**
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
65. **Effects of ultrathin InGa_N channel layer on two dimensional electron gas in hybrid Ga_N/InGa_N/ZnO heterostructures**
NARİN P., Atmaca G., LİŞESİVDİN S. B.
Turkish Physical Society 31th International Physics Congress, Muğla, Turkey, 21 July 2014, pp.406
66. **SiC üzerine büyütilen grafen yapılarında elektriksel iletim kanallarının ayrıştırılıp incelenmesi**
LİŞESİVDİN S. B., Atmaca G., ARSLAN E., Ul-Hassan J., Janzen E., ÖZBAY E.
19. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 20 December 2013, pp.13
67. **Gain in electrically-driven 1.3 μ m dilute nitride VCSOAs**
LİŞESİVDİN S. B., Khan N. A., Mazzucato S., Balkan N., Adams M. J.
COST MP0805 Final Meeting, İstanbul, Turkey, 24 September 2013, pp.17
68. **Scattering Analysis of 2DEG in AlIn_N/Ga_N Based Heterostructures With Ga_N and InGa_N 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
69. **The Investigation of Temperature Dependent Electrical Transport Properties of In_xGa_{1-x}P/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
70. **A Numerical Investigation on Electronic Properties of Two Dimensional Electron Gas in Be_xZn_{1-x}O/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
71. **First Principles Study of Interaction Between Ru and Graphene Nanoribbons**
LİŞESİVDİN B., LİŞESİVDİN S. B., ÖZBAY E.
2nd Int. Conf. on Comp. for Sci. and Techno, Niğde, Turkey, 9 - 11 July 2012, pp.70
72. **Electron Confinement in Lattice-Matched InAl_N/Al_N/Ga_N Heterostructures with Al_yGa_{1-y}N Back-barrier**
Atmaca G., TUNAY TAŞLI P., LİŞESİVDİN S. B.
8th Nanoscience and Nanotechnology Conference, Ankara, Turkey, 25 - 29 June 2012, pp.332
73. **InAl_N/Ga_N Temelli Yüksek Elektron Mobiliteli Transistörlerin (HEMT) Elektron ve Magneto İletim Özellikleri**
TUNAY TAŞLI P., LİŞESİVDİN S. B., KASAP M., ÖZÇELİK S., ÖZBAY E.
ADIM Physics Congress II, Denizli, Turkey, 25 - 27 April 2012, pp.65
74. **AlGa_N/Ga_N-temelli Yüksek Hareketlilik Sahip Transistorlerde InGa_N Geribariyerin Dislokasyon Yoğunluğuna Etkisi**
LİŞESİVDİN B., LİŞESİVDİN S. B., ÖZBAY E.
ADIM Physics Congress II, Denizli, Turkey, 25 - 27 April 2012, pp.131
75. **Ga_N-tabanlı HEMT Yapıların Hareketliliği ve Tasiyici Yoğunluğunun Deneysel İncelenmesi**
Güneş C., Kuloğlu A. F., LİŞESİVDİN S. B., ÖZBAY E.
1. Yoğun Madde Fiziği İzmir Toplantısı, İzmir, Turkey, 06 April 2012, pp.18
76. **Kenarları Paladyum Atomları ile Sonlandırılmış Farklı Genisliklerdeki Armchair Grafen**

Nanoseritlerin Elektronik Özelliklerinin Yoğunluk Fonksiyonu Teorisi Kullanılarak İncelenmesi

Kuloğlu A. F., Alsancak B., Güneş C., LİŞESİVDİN S. B., ÖZBAY E.

1. Yoğun Madde Fiziği İzmir Toplantısı, İzmir, Turkey, 06 April 2012, pp.1

77. Self-consistent Transport Properties of Graphene Sheets

Elibol K., Atmaca G., Kelekçi Ö., TUNAY TAŞLI P., ÖZBAY E., LİŞESİVDİN S. B.

Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 6 - 09 September 2011, pp.710

78. A Numerical Study on Effects of InAlN/AlGaN Barrier in InAlN/AlGaN/AlN/GaN-based High Electron Mobility Transistors

Elibol K., Güneş C., Kuloğlu A. F., Boyalı E., LİŞESİVDİN S. B.

Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 6 - 09 September 2011, pp.711

79. Numerical Investigation of Two-dimensional Electron Gas in AlGaN/AlN/GaN HEMT with InGaN/GaN Multi-quantum Well Structure

Karakoç G., Atmaca G., Yazbahar E., TUNAY TAŞLI P., LİŞESİVDİN S. B.

Turkish Physical Society 28th International Physics Congress, Muğla, Turkey, 6 - 09 September 2011, pp.745

80. Determination of the in-plane effective mass and quantum lifetime of 2D electrons in AlGaN/GaN based HEMTs

Celik O., Tiras E., Ardali S., LİŞESİVDİN S. B., ÖZBAY E.

3rd International Symposium on Growth of III-Nitrides (ISGN), Montpellier, France, 4 - 07 July 2010, vol.8

81. GaAs Tabanlı Bir MOSFET Yapının 2-Boyutta Akım – Gerilim Karakteristiklerinin İncelenmesi

Kuloğlu A. F., LİŞESİVDİN S. B., KASAP M.

17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.88

82. Erbiyum Katkılı Eklem Diyotun I-V Karakteristiği

Kartaloğlu O., Atmaca G., Elibol K., LİŞESİVDİN S. B.

17. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 05 October 2010, pp.46

83. 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

84. InGaN arka bariyerli Al_xGa_{1-x}N/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

85. 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

86. Eklem Alan Etkili Transistörlerin Elektriksel Karakteristiklerinin İncelenmesi

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

87. Double Heterostructure AlGa_N/Ga_N/AlGa_N HEMT Based on Grading AlGa_N/AlN Buffer Layer

Yu H., LİŞESİVDİN S. B., Bölükbaş B., Kelekçi Ö., Öztürk M., Çakmak H.

2009 MRS Fall Meeting, I: III-Nitride Materials for Sensing, Energy Conversion, and Controlled Light-Matter Interactions, SESSION I4: Surface and Interface Properties II, Boston, United States Of America, 29 November - 03 December 2009, pp.4

88. Safir ve SiC Üzerine Büyütülmüş AlGa_N/AlN/GaN HEMT Yapılarındaki Sıcak Elektron Dinamiğinin Karşılaştırılması

İlgaz A., Gökden S., Teke A., Özçelik S., Lişesivdin B., Özbay E.

16. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 06 November 2009, pp.73

89. Çift kanallı AlGaAs/InGaAs/GaAs tabanlı p-HEMT Yapılarında 1 ve 2-boyutta Schrödinger-Poisson Çözümleri ve Akım-Gerilim İncelemeleri

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

90. Safir ve SiC Üzerine Büyütülmüş AlGa_N/AlN/GaN HEMT Yapılarındaki Sıcak Elektron Dinamiğinin

Karsilastirilmesi

ILGAZ A., GÖKDEN S., TEKE A., ÖZÇELİK S., LİŞESİVDİN S. B., ÖZBAY E.

16. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 06 October 2009, pp.73

91. **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
92. **A Numerical Study on Subband Structure of Al_xIn_{1-x}N/GaN-based HEMT Structures with Low-Indium ($x \geq 0.82$) 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
93. **Determination of Two-Dimensional Electron and Hole Gas Carriers in Al_{0.88}In_{0.12}N/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
94. **Investigation of the Beating Pattern of Shubnikov-De Haas Oscillations and Spin Splitting in AlGaN/AlN/GaN/AlN Heterostructures**
LİŞESİVDİN S. B., Balkan N., Makarovskiy 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
95. **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
96. **Optimization of Al-mole Fraction and Layer Thicknesses in Al_xGa_{1-x}N/AlN/GaN/Al_xGa_{1-x}N/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
97. **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
98. **A Simple Parallel Conduction Extraction Method for MODFET's and Undoped GaN-based HEMTs**
LİŞESİVDİN S. B., Balkan N., ÖZBAY E.
Workshop on Recent Advances of Low Dimensional Structures and Devices, Nottingham, United Kingdom, 7 - 09 April 2008, pp.90
99. **Stokes shift in In_{0.13}Ga_{0.87}N 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
100. **MBE Growth and Characterization of n-AlGaAs/GaAs Heterojunction**
ALTUNTAŞ H., LİŞESİVDİN S. B., YILDIZ A., Mammedov T., ÖZÇELİK S.
Turkish Physical Society 24th International Physics Congress, Malatya, Turkey, 28 - 31 August 2007, pp.414
101. **Improved Scattering Analysis of 2DEG carriers in Al_{0.25}Ga_{0.75}N/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
102. **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
103. **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
104. **Strain calculations from hall measurements in undoped Al_{0.25}Ga_{0.75}N/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

105. **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
106. **Mole fraction dependence of mobility in In_xGa_{1-x}N 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
107. **Transport properties of the 2DEG and minority carriers in AlGa_N/Ga_N 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
108. **Two dimensional hole gas (2DHG) formation evidence in AlGa_N/Ga_N/Al_N HEMTs**
ACAR S., LİŞESİVDİN S. B., KASAP M.
13. Yoğun Madde Fiziği Ankara Toplantısı, Ankara, Turkey, 03 November 2006, pp.105
109. **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
110. **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
111. **Temperature dependence 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

Academic and Administrative Experience

2023 - 2026	Head of Department	Gazi University, Fen Fakültesi, Fizik
2021 - 2023	Rectorate Commissioner	Gazi University, Fen Fakültesi, Fizik
2016 - 2018	Erasmus Program Institutional Coordinator	Gazi University, Fen Fakültesi, Fizik Bölümü
2011 - 2014	Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi	Gazi University, Araştırma ve Uygulama Merkezleri, Fotonik Uygulama ve Araştırma Merkezi

Courses

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 Research Project I, Undergraduate, 2022 - 2023, 2021 - 2022, 2018 - 2019, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2009 - 2010
 Micro and Nanofabrication Methods , Doctorate, 2021 - 2022, 2020 - 2021
 Physics of Low-dimensional Semiconductors, Doctorate, 2021 - 2022, 2020 - 2021
 Physics I, Undergraduate, 2020 - 2021
 Physics II, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018
 Micro and Nanofabrication Methods, Doctorate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014

- 2015, 2013 - 2014, 2012 - 2013

Research Project II, Undergraduate, 2018 - 2019, 2014 - 2015, 2011 - 2012, 2009 - 2010

Physics of Low-dimensional Semiconductors, Doctorate, 2017 - 2018, 2016 - 2017, 2013 - 2014

Physics I, Undergraduate, 2018 - 2019

Introduction to Nanotechnology, Undergraduate, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Physics II, Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2011 - 2012

Physics I, Undergraduate, 2014 - 2015, 2011 - 2012

Physics I, Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012

Maddenin Özellikleri, Undergraduate, 2012 - 2013

Fizik, Undergraduate, 2012 - 2013

Physics Laboratory (Mechanics), Undergraduate, 2011 - 2012, 2009 - 2010

Physics I, Undergraduate, 2011 - 2012, 2009 - 2010

Basic Computer Usage and Fortran Language, Undergraduate, 2011 - 2012

Physics II, Undergraduate, 2009 - 2010

Physics II, Undergraduate, 2009 - 2010

Advising Theses

LİŞESİVDİN S. B., Investigation Of Structural And Optical Properties Of Zno And Mgzno Crystals Grown By Uscvd, Doctorate, P.NARİN(Student), 2021

LİŞESİVDİN S. B., RF magnetron sputter sistemi ile pasif devre elemanı rezistör üretimi ve karakterizasyonu, Postgraduate, K.BERK(Student), 2019

LİŞESİVDİN S. B., GaN tabanlı alan etkili transistörlerde SiC arka-yüzey geçiş deliği aşındırma uygulaması, Postgraduate, M.TAHA(Student), 2019

LİŞESİVDİN S. B., Back Side Via Hole Etching Application Of Sic For Gan Based Field Effect Transistors, Postgraduate, M.Taha(Student), 2019

LİŞESİVDİN S. B., Electrical Characteristics And Scattering Analysis Of Ultrathin Barrier Gan-Based High Electron Mobility Transistors, Postgraduate, M.ÖZTÜRK(Student), 2018

LİŞESİVDİN S. B., Investigations Of Low-Field Transport And Hot-Electron Transport In Passivated Algan/Gan Hemts With Si₃N₄, Doctorate, G.ATMACA(Student), 2018

LİŞESİVDİN S. B., Investigation Of The Electronic Properties Of Zn, Cd And Hg Doped Graphene Sheets With Ab-Initio Methods, Postgraduate, Ö.ÖMEROĞLU(Student), 2018

LİŞESİVDİN S. B., Investigation of electronic and optical properties of wurtzite MgZnO with first principles calculations, Postgraduate, R.İBRAHEM(Student), 2018

LİŞESİVDİN S. B., Investigation Of Electronic And Optical Properties Of Wurtzite Mgzno With First Principles Calculations, Postgraduate, R.İbrahim(Student), 2018

LİŞESİVDİN S. B., The Investigation Of The Effect Of Al, Ga, In And As Impurities On Electronic And Optical Properties Of Beta-Si₃N₄ Compound With Density Functional Theory, Postgraduate, E.KUTLU(Student), 2016

LİŞESİVDİN S. B., GaN-temelli ultraince bariyerli yüksek elektron devingenlikli transistörlerinin benzetimi ve optimizasyonu, Postgraduate, J.MOSTAFA(Student), 2016

LİŞESİVDİN S. B., Electron And Magnetotransport Investigation Of 2- Dimensional Electron Gas In Ultrathin Barrier Gan-Based Heterostructures, Postgraduate, C.GÜNEŞ(Student), 2013

LİŞESİVDİN S. B., Numerical investigation of the 2-dimensional carriers in ALQN/ALN/GAN-BASED (Q=GA, İN) transistors with multi-quantum well back-barriers, Postgraduate, G.ATMACA(Student), 2012

LİŞESİVDİN S. B., Investigation of electron transport properties AllnN/AlN/(InGaN)/GaN in multi-structures with InGaN quantum well, Postgraduate, G.KARAKOÇ(Student), 2012

LİŞESİVDİN S. B., Investigation of electronic properties of pd-terminated graphene nanoribbons, Postgraduate, A.FATİH(Student), 2012

LİŞESİVDİN S. B., Investigation of magnetoconductivity and surface properties of exfoliated and epitaxially grown graphene samples, Postgraduate, K.ELİBOL(Student), 2012

Activities in Scientific Journals

Advances in Condensed Matter Physics, Committee Member, 2019 - Continues

Plos One, Committee Member, 2019 - Continues

Advances in OptoElectronics, Committee Member, 2019 - 2019

Plos One, Committee Member, 2013 - 2017

Memberships / Tasks in Scientific Organizations

IEEE Quantum Community, Principal Member, 2023 - Continues, United States Of America

IEEE Young Professionals, Principal Member, 2014 - Continues, United States Of America

Institute of Electrical and Electronics Engineers (IEEE), Principal Member, 2005 - Continues, United States Of America

IEEE Electron Devices Society, Member, 2005 - 2022, United States Of America

IEEE Communications Society, Member, 2006 - 2006, United States Of America

Society of Photographic Instrumentation Engineers (SPIE), Member, 2006 - 2006, United States Of America

Scientific Refereeing

CHEMICAL PHYSICS, SCI Journal, October 2021

PHYSICA E: LOW-DIMENSIONAL SYSTEMS AND NANOSTRUCTURES, SCI Journal, September 2021

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, December 2020

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, November 2020

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, October 2020

JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, SCI Journal, October 2020

DIAMOND AND RELATED MATERIALS, SCI Journal, October 2020

PHILOSOPHICAL MAGAZINE LETTERS, SCI Journal, July 2020

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, July 2020

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, July 2020

DIAMOND AND RELATED MATERIALS, SCI Journal, May 2020

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, May 2020

SYNTHETIC METALS, SCI Journal, March 2020

PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, SCI Journal, February 2020

SUPERLATTICES AND MICROSTRUCTURES, SCI Journal, March 2018

SUPERLATTICES AND MICROSTRUCTURES, SCI Journal, May 2017

SUPERLATTICES AND MICROSTRUCTURES, SCI Journal, May 2017

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, SCI Journal, July 2015

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, SCI Journal, June 2015

SEMICONDUCTOR SCIENCE AND TECHNOLOGY, SCI Journal, April 2014

NANOTECHNOLOGY, SCI Journal, September 2013

Tasks In Event Organizations

Lişesivdin S. B., 2nd International Summit on Graphene & 2D Materials (ISG2DM2024), Scientific Congress, Munich, Germany, Nisan 2024

Lişesivdin S. B., 4. Uluslararası Türk Dünyası Mühendislik ve Fen Bilimleri Kongresi, Scientific Congress, Antalya, Turkey, Aralık 2023

Lişesivdin S. B., VIII. ADIM Physics, Scientific Congress, Bilecik, Turkey, Eylül 2019

Lişesivdin S. B., VII. ADIM Physics, Scientific Congress, Aydın, Turkey, Mayıs 2018

Lişesivdin S. B., VI. ADIM Physics, Scientific Congress, Balıkesir, Turkey, Temmuz 2017

Lişesivdin S. B., 2nd International Nanoscience and Nanotechnology for Next Generation (NaNoNG), Scientific Congress, Antalya, Turkey, Ekim 2015

Lişesivdin S. B., 1st International Conference on Organic Electronic Material Technologies (OEMT-2015) , Scientific Congress, Elazığ, Turkey, Mart 2015

Scientific Research / Working Group Memberships

Low-Dimensional Materials And Systems, Gazi University, Türkiye, <https://www.lrgresearch.org/>, 2010 - Continues

Metrics

Publication: 201

Citation (WoS): 1149

Citation (Scopus): 1119

H-Index (WoS): 19

H-Index (Scopus): 18

Research Areas

Surfaces, Interfaces, Thin Films and Nanosystems, Electronic structure of bulk material, 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

Entrepreneurship Activities

Limited, Biarsis Ar-Ge Elektr. San. ve Tic. Ltd. Şti., 29 August 2018, Founder Owner

Non Academic Experience

University of Ulm

University of Essex

Bilkent Üniversitesi Nanoteknoloji Araştırma Merkezi

University of Essex