Assoc. Prof. İSMAİL ALTUNTAŞ

Personal Information

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Education Information

Doctorate, Sivas Cumhuriyet University, Fen Fakültesi, Fizik Bölümü, Turkey 2013 - 2018
Postgraduate, Sivas Cumhuriyet University, Fen Fakültesi, Fizik Bölümü, Turkey 2009 - 2013
Undergraduate, Sivas Cumhuriyet University, Fen Fakültesi, Fizik Bölümü, Turkey 2005 - 2009

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Safir alttaş üzerine mavi LED yapısının büyütülmesi ve yapısal karakterizasyonu, Sivas Cumhuriyet University, Fen Bilimleri Enstitüsü, Physicis, 2018
Postgraduate, Safir alttaş üzerine büyütülen GaN heteroyapılarının Hall sistemi ile elektriksel karakterizasyonu., Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Fizik Bölümü, 2013

Research Areas

Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2022 - Continues
Assistant Professor, Sivas Cumhuriyet University, Mühendislik Fakültesi, Nanoteknoloji Mühendisliği, 2018 - 2022
Research Assistant, 2011 - 2018

Academic and Administrative Experience

University Executive Board Member, 2021 - Continues
Deputy Director of the Center, 2021 - Continues
Erasmus Program Institutional Coordinator, 2018 - 2022

Courses

Nanomalzemelerde Karakterizasyon Yöntemleri - I, Undergraduate, 2018 - 2019
Mühendisler için Karmaşık Analiz (İngilizce), Undergraduate, 2019 - 2020
Vakum Tekniği ve Teknolojisi, Postgraduate, 2019 - 2020
Mühendisler için Termodinamik - I (İngilizce), Undergraduate, 2019 - 2020
İş Güvenliği ve Sağlığı, Undergraduate, 2018 - 2019
Düşük Boyutlu Sistemler, Undergraduate, 2018 - 2019
Nanomalzemelerde Karakterizasyon Yöntemleri - II, Undergraduate, 2019 - 2020
Nanomalzemelerin Üretim Yöntemleri - II, Undergraduate, 2018 - 2019
Uzmanlık Alan Dersi, Postgraduate, 2019 - 2020
İş Sağlığı ve Güvenliği - I, Undergraduate, 2019 - 2020
Mühendisler için Termodinamik - II(İngilizce), Undergraduate, 2018 - 2019
Seminer Dersi, Postgraduate, 2019 - 2020

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Effect of substrate temperature on Raman study and optical properties of GeOx/Si thin films**
Baghdedi D., Hopoğlu H., DEMİR İ., ALTUNTAŞ İ., Abdelmoula N., Tüzemen E.
Journal of the Australian Ceramic Society, vol.60, no.2, pp.591-599, 2024 (SCI-Expanded)

II. **Electrical characteristics of Al/AlGaAs/GaAs diode with high-Al concentration at the interface**
Gullu H., Yıldız D., Yıldırım M., DEMİR İ., ALTUNTAŞ İ.
Journal of Materials Science: Materials in Electronics, vol.35, no.2, 2024 (SCI-Expanded)

III. **Modeling of temperature-dependent photoluminescence of GaN epilayer by artificial neural network**
Tüzemen E., YÜKSEK A. G., DEMİR İ., Horoz S., ALTUNTAŞ İ.
Journal of the Australian Ceramic Society, vol.59, no.5, pp.1145-1159, 2023 (SCI-Expanded)

IV. **Influence of Highly Efficient Carbon Doping on AlxGa1−xAs Layers with Different Al Compositions (x) Grown by MOVPE**
Perkitel I., Kekül R., ALTUNTAŞ İ., GÜR E., DEMİR İ.
Journal of Electronic Materials, vol.52, no.9, pp.6042-6051, 2023 (SCI-Expanded)

V. **Investigating the optical, electronic, magnetic properties and DFT of NiO films prepared using RF sputtering with various argon pressures**
Hopoğlu H., KAYA D., Maslov M. M., KAYA S., DEMİR İ., ALTUNTAŞ İ., UNGAN F., Akyol M., EKİCİBİL A., Tüzemen E.
Physica B: Condensed Matter, vol.661, 2023 (SCI-Expanded)

VI. **Comprehensive growth and characterization study of GeOx/Si**
Baghdedi D., Hopoğlu H., SARITAŞ S., DEMİR İ., ALTUNTAŞ İ., Abdelmoula N., GÜR E., Tüzemen E.
Journal of Molecular Structure, vol.1274, 2023 (SCI-Expanded)

VII. **High-quality AlN growth: a detailed study on ammonia flow**
Yolcu G., Koçak M. N., Ünal D. H., ALTUNTAŞ İ., Horoz S., DEMİR İ.
Journal of Materials Science: Materials in Electronics, vol.34, no.4, 2023 (SCI-Expanded)

VIII. **Experimental insights toward carrier localization in in-rich InGaAs/InP as candidate for SWIR detection: Microstructural analysis combined with optical investigation**
Ben Arbia M., DEMİR İ., Kaur N., Saidi F., Zappa D., Comini E., ALTUNTAŞ İ., Maaref H.
Materials Science in Semiconductor Processing, vol.153, 2023 (SCI-Expanded)

IX. **In-situ thermal cleaning of the sapphire substrate and temperature effect on epitaxial AlN**
Kocak M. N., Yolcu G., Horoz S., ALTUNTAŞ İ., DEMİR İ.
VACUUM, vol.205, 2022 (SCI-Expanded)

X. **Determination of Optical Properties of MOVPE-Grown InxGa1-xAs/InP Epitaxial Structures by Spectroscopic Ellipsometry**
Kaynar E., Sayrac M., Altuntas I., Demir I.

BRAZILIAN JOURNAL OF PHYSICS, vol.52, no.5, 2022 (SCI-Expanded)

XI. **In-situ and ex-situ face-to-face annealing of epitaxial AlN**
Kocak M. N., Purlue K. M., Perkitel I., ALTUNTAŞ İ., DEMİR İ.
VACUUM, vol.203, 2022 (SCI-Expanded)

XII. **The influence of TMGa pre-flow time and amount as surfactant on the structural and optical properties of AlN epilayer**
Yolcu G., Simsek I., Kekul R., Altuntaş İ., Horoz S., Demir İ.
MICRO AND NANOSTRUCTURES, vol.168, 2022 (SCI-Expanded)

XIII. **Optical and nano-mechanical characterization of c-axis oriented AlN film**
Panda P., Rajagopalan R., Tripursundari S., ALTUNTAŞ İ., DEMİR İ.
Optical Materials, vol.129, 2022 (SCI-Expanded)

XIV. **Growth and characterization of PALE Si-doped AlN on sapphire substrate by MOVPE**
Purlu K. M., Kocak M. N., Yolcu G., Perkitel I., Altuntaş İ., Demir İ.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.142, 2022 (SCI-Expanded)

XV. **<p>Systematic optical study of high-x InxGa1-xAs/InP structures for infrared photodetector applications & nbsp;</p>**
Badreddine S., Joshya R. S., DEMİR İ., Faouzi S., ALTUNTAŞ İ., Lagarde D., Rober C., Xavier M., Hassen M.
OPTICS AND LASER TECHNOLOGY, vol.148, 2022 (SCI-Expanded)

XVI. **Theoretical analyses of the carrier localization effect on the photoluminescence of In-rich InGaAs layer grown on InP**
Smiri B., DEMİR İ., Saidi F., ALTUNTAŞ İ., Hassen F., Maaref H., Arbia M. B.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.140, 2022 (SCI-Expanded)

XVII. **ZnO/Al2O3 layered structures deposited by RF magnetron sputtering on glass: growth characteristics, optical properties, and microstructural analysis**
ŞENADIM TÜZEMEN E., ÖZER A., DEMİR İ., ALTUNTAŞ İ., ŞİMŞİR M.
JOURNAL OF THE AUSTRALIAN CERAMIC SOCIETY, vol.57, no.5, pp.1379-1388, 2021 (SCI-Expanded)

XVIII. **Combined effects of electric, magnetic, and intense terahertz laser fields on the nonlinear optical properties in GaAs/GaAlAs quantum well with exponentially confinement potential**
Altuntas İ., Dakhlaoui H., Mora-Ramos M. E., Ungan F.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.136, no.11, 2021 (SCI-Expanded)

XIX. **Arsine Flow Rate Effect on the Low Growth Rate Epitaxial InGaAs Layers**
Demir I., Altuntas İ., Elagoz S.
SEMICONDUCTORS, vol.55, no.10, pp.816-822, 2021 (SCI-Expanded)

XX. **Nucleation layer temperature effect on AlN epitaxial layers grown by metalorganic vapour phase epitaxy**
Simsek I., Yolcu G., Kocak M., Purlu K., ALTUNTAŞ İ., DEMİR İ.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.20, pp.25507-25515, 2021 (SCI-Expanded)

XXI. **Effects of applied external fields on the nonlinear optical rectification, second, and third harmonic generation in a quantum well with exponentially confinement potential**
Altuntas İ.
EUROPEAN PHYSICAL JOURNAL B, vol.94, no.9, 2021 (SCI-Expanded)

XXII. **Numerical simulation of linear and nonlinear optical properties in heterostructure based on triple Gaussian quantum wells: effects of applied external fields and structural parameters**
Dakhlaoui H., Altuntas İ., Mora-Ramos M. E., Ungan F.
EUROPEAN PHYSICAL JOURNAL PLUS, vol.136, no.8, 2021 (SCI-Expanded)

XXIII. **Influence of the PALE growth temperature on quality of MOVPE grown AlN/Si (111)**
ALTUNTAŞ İ., Kocak M. N., Yolcu G., BUDAK H. F., KASAPOĞLU A. E., Horoz S., GÜR E., DEMİR İ.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.127, 2021 (SCI-Expanded)

XXIV. **Optical and structural properties of In-rich InxGa1−xAs epitaxial layers on (1 0 0) InP for SWIR detectors**

Smiri B., Ben Arbia M., Ilkay D., Saidi F., Othmen Z., Dkhil B., Ismail A., Sezai E., Hassen F., Maaref H.
Materials Science and Engineering B: Solid-State Materials for Advanced Technology, vol.262, 2020 (SCI-Expanded)

XXV. **Distributed contact flip chip InGaN/GaN blue LED; comparison with conventional LEDs**
Genc M., Sheremet V., Elci M., Kasapoglu A. E., Altuntas İ., Demir İ., Egin G., Islamoglu S., GÜR E., Muzafferoglu N., et al.
SUPERLATTICES AND MICROSTRUCTURES, vol.128, pp.9-13, 2019 (SCI-Expanded)

XXVI. **Microstructural Evolution of MOVPE Grown GaN by the Carrier Gas**
Demir İ., Altuntas İ., Kasapoglu A. E., Mobtakeri S., Guer E., Elagoz S.
SEMICONDUCTORS, vol.52, no.16, pp.2030-2038, 2018 (SCI-Expanded)

XXVII. **Comprehensive growth and characterization study on highly n-doped InGaAs as a contact layer for quantum cascade laser applications**
DEMİR İ., ALTUNTAŞ İ., Bulut B., Ezzedini M., ERGÜN Y., ELAGÖZ S.
SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.33, no.5, 2018 (SCI-Expanded)

XXVIII. **InGaN stress compensation layers in InGaN/GaN blue LEDs with step graded electron injectors**
Sheremet V., Gheshlaghi N., Sozen M., Elci M., Sheremet N., Aydinli A., Altuntas İ., Ding K., Avrutin V., Ozgur U., et al.
SUPERLATTICES AND MICROSTRUCTURES, vol.116, pp.253-261, 2018 (SCI-Expanded)

XXIX. **Simulation of Highly Reflective GaN/AlxGa1-xN Distributed Bragg Reflector Structure for UV-Blue LEDs**
Alaydin B. Ö., Altuntas İ., Tuzemen E., Elagoz S.
JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS, vol.13, no.3, pp.387-393, 2018 (SCI-Expanded)

XXX. **The effects of two-stage HT-GaN growth with different V/III ratios during 3D-2D transition**
ALTUNTAŞ İ., DEMİR İ., KASAPOĞLU A. E., Mobtakeri S., GÜR E., ELAGÖZ S.
JOURNAL OF PHYSICS D-APPLIED PHYSICS, vol.51, no.3, 2018 (SCI-Expanded)

XXXI. **Two-step passivation for enhanced InGaN/GaN light emitting diodes with step graded electron injectors**
Sheremet V., Genc M., Gheshlaghi N., Elci M., Sheremet N., Aydinli A., Altuntas İ., Ding K., Avrutin V., Ozgur U., et al.
SUPERLATTICES AND MICROSTRUCTURES, vol.113, pp.623-634, 2018 (SCI-Expanded)

XXXII. **The role of ITO resistivity on current spreading and leakage in InGaN/GaN light emitting diodes**
Sheremet V., Genc M., Elci M., Sheremet N., Aydinli A., Altuntas İ., Ding K., Avrutin V., Ozgur U., Morkoc H.
SUPERLATTICES AND MICROSTRUCTURES, vol.111, pp.1177-1194, 2017 (SCI-Expanded)

XXXIII. **Growth kinetics of O-polar BexMgyZn1-x-yO alloy: Role of Zn to Be and Mg flux ratio as a guide to growth at high temperature**
Ullah M. B., Avrutin V., Nakagawara T., Hafiz S., Altuntas İ., Ozgur U., Morkoc H.
JOURNAL OF APPLIED PHYSICS, vol.121, no.18, 2017 (SCI-Expanded)

XXXIV. **The hydrostatic pressure and temperature effects on hydrogenic impurity binding energies in GaAs/InxGa1-xAs/GaAs square quantum well**
Baser P., Altuntas İ., Elagoz S.
SUPERLATTICES AND MICROSTRUCTURES, vol.92, pp.210-216, 2016 (SCI-Expanded)

XXXV. **Structural and electrical properties of nitrogen-doped ZnO thin films**
Tuzemen E., Kara K., ELAGÖZ S., TAKCI D. K., ALTUNTAŞ İ., ESEN R.
APPLIED SURFACE SCIENCE, vol.318, pp.157-163, 2014 (SCI-Expanded)

Articles Published in Other Journals

I. **The effect of Si (111) substrate surface cleaning on growth rate and crystal quality of MOVPE grown AlN**
Perkitel İ., Altuntaş İ., Demir İ.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.35, no.1, pp.281-291, 2022 (ESCI)

II. **XRD and photoluminescence measurements of GaN grown on dome shaped patterned sapphire with**

different NH3 flow rates
ALTUNTAŞ İ.
Cumhuriyet Science Journal, vol.42, 2021 (Peer-Reviewed Journal)

III. **The GaN Epilayer Grown by MOVPE: Effect of The Different Nucleation Layer Temperatures**
ALTUNTAŞ İ., ELAGÖZ S.
International Journal of Innovative Engineering Applications, vol.5, no.1, pp.6-10, 2021 (Peer-Reviewed Journal)

IV. **In Concentration Dependence of Shallow Impurity Binding Enegry Under The Hydrostatic Pressure**
BAŞER P., ALTUNTAŞ İ., ELAGÖZ S.
Marmara Üniversitesi Fen Bilimleri Dergisi, vol.23, no.4, pp.171-180, 2011 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **Comprehensive Growth and Characterization Study of GeOx/Si**
Baghdedi D., Hopoğlu H., Sarıtaş S., Demir İ., Altuntaş İ., Abdelmoula N., Gür E., Şenadım Tüzemen E.
5 th International Conference on Physical Chemistry & Functional Materials, Sivas, Turkey, 23 - 25 June 2022, pp.37

II. **Reflectance properties of Geo2 films grown on P-Si substrate deposited by Magnetron Sputtering**
Baghdedi D., Hopoğlu H., Sarıtaş S., Demir İ., Altuntaş İ., Abdelmoula N., Gür E., Şenadım Tüzemen E.
3nd International Conference on Light and Light-based Technologies (ICLLT), Ankara, Turkey, 25 - 27 May 2022, pp.1-2

III. **Dependence of film thicknesses on the XRD, AFM and Transmittance Properties of NiOx**
Hopoğlu H., Kaya D., Akyol M., Demir İ., Altuntaş İ., Ekicibil A., Şenadım Tüzemen E.
3nd International Conference on Light and Light-based Technologies (ICLLT), Ankara, Turkey, 25 - 27 May 2022, pp.1-2

IV. **EFFECT OF V/III RATIO ON AlN THIN FILMS GROWN ON PATTERNED SAPPHIRE SUBSTRATE**
Özbakır F. K., ALTUNTAŞ İ., DEMİR İ.
the 13th International Scientific Research Congress, 11 - 12 March 2022

V. **Sputtered AlN for Distributed Bragg Reflectors Operating in the SWIR Wavelengths**
Kaynar E., Hopoglu H., ALTUNTAŞ İ., DEMİR İ., SAYRAÇ M., Tüzemen E., ALAYDİN B. Ö.
Novel Optical Materials and Applications, NOMA 2022, Maastricht, Netherlands, 24 - 28 July 2022

VI. **The Effect of Growth Temperature on the Electrical Properties of Carbon-doped AlxGa1-xAs Grown by MOVPE**
Kekül R., Altuntaş İ., Demir İ.
9th International Advanced Technologies Symposium (IATS'21), Elazığ, Turkey, 27 - 28 October 2021, pp.280-283

VII. **The Effect of Growth Temperature on the Electrical Features of Carbon-doped AlxGa1-xAs Grown by MOVPE**
Kekül R., ALTUNTAŞ İ., DEMİR İ.
9TH INTERNATIONAL ADVANCED TECHNOLOGIES SYMPOSIUM (IATS'21), 27 - 28 October 2021

VIII. **Effect of Al Ratio on Optical and Structural Properties of MOCVD Grown AlGaAs/GaAs Epitaxial Structures**
Kaynar E., ALTUNTAŞ İ., DEMİR İ.
9TH INTERNATIONAL ADVANCED TECHNOLOGIES SYMPOSIUM (IATS'21), 27 - 28 October 2021

IX. **Influence of Pressure on ZnO/Al2O3 Produced by RF Magnetron Sputtering on Glass Substrate**
Hopoğlu H., Aydınoğlu H., DEMİR İ., ALTUNTAŞ İ., ŞİMŞİR M., ŞENADIM TÜZEMEN E.
9TH INTERNATIONAL ADVANCED TECHNOLOGIES SYMPOSIUM (IATS'21), 27 - 28 October 2021

X. **Investigation of the Optical Properties of the Exponential Confinement GaAs/AlGaAs Quantum Well Under Applied External Fields**
ALTUNTAŞ İ.
The 11th International Scientific Research Congress, 20 - 21 August 2021

XI. **The influence of the different arsine flows on the properties of InGaAs layer grown on InP substrate**

by MOVPE
ALTUNTAŞ İ.
2. INTERNATIONAL ENGINEERING AND ARCHITECTURE CONGRESS, 22 - 23 May 2021

XII. **MOVPE PALE Tekniği ile Safir Üzerine Si Katkılı AlN'ın Epitaksiyel Büyütülmesi ve Karakterizasyonu**
Pürlü K. M., Perkitel İ., Altuntaş İ., Demir İ.
9. Uluslararası Bilimsel Araştırmalar Kongresi, Fen ve Mühendislik Bilimleri, Ankara, Turkey, 12 - 13 December 2020, pp.167

XIII. **Çekirdeklenme Tabakası Sıcaklığının MOCVD Yöntemi İle Büyütülen AlN İnce Filmlerin Kristal Kalitesi Üzerindeki Etkisi**
Şimşek İ., Yolcu G., Koçak M. N., Altuntaş İ., Demir İ.
9. Uluslararası Bilimsel Araştırmalar Kongresi, Fen ve Mühendislik Bilimleri, Ankara, Turkey, 12 - 13 December 2020, pp.417-426

XIV. **Si (111) Alttaşı Üzerine Büyütülmüş AIN İnce Filmlerin Spektroskopik Elipsometri Tekniği İle Optik Karakterizasyonu**
Karakuş İ., Altuntaş İ., Demir İ.
9. Uluslararası Bilimsel Araştırmalar Kongresi, Fen ve Mühendislik Bilimleri, Ankara, Turkey, 12 - 13 December 2020, pp.125

XV. **PECVD grown SiN photonic crystal micro-domes for the light extraction enhancement of GaN LEDs**
Genç M., Sheremet V., Altuntaş İ., Demir İ., Gür E., Elagöz S., Gülseren O., Özgür U., Avrutin V., Morkoç H., et al.
Conference on Gallium Nitride Materials and Devices XV, San-Francisco, Costa Rica, 4 - 06 February 2020, vol.11280

XVI. **Annealing effect on optical and electrical properties of p-GaN**
ALTUN D., ALTUNTAŞ İ., DEMİR İ., GÜR E., ELAGÖZ S.
International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2018), 22 - 23 November 2018

XVII. **Defect Reduction in GaN Epilayer With Different V/III Ratio Grown On Patterned Sapphire Substrate**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., Bulut B., ELAGÖZ S.
International Congress on Engineering and Architecture (ENAR-2018), 14 - 16 November 2018

XVIII. **Pulsed MOVPE Growth of High Quality AlGaN epilayers for Ultraviolet LED Applications**
DEMİR İ., McClintock R., KOÇAK Y., ALTUNTAŞ İ., KASAPOĞLU A. E., GÜR E., ELAGÖZ S., Razeghi M.
European Conference on Laser Optics Photonics, 16 - 17 July 2018

XIX. **Growth and characterization of epitaxially grown GaN layer on patterned sapphire substrate**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., Bulut B., ELAGÖZ S.
Lasers Optics Photonics and Atomic Plasma Science, 16 - 17 July 2018

XX. **Comprehensive comparison of epitaxially grown GaN layer grown on conventional sapphire and patterned sapphire substrate**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., Bulut B., ELAGÖZ S.
19th World Congress on Materials Science and Engineering, 11 - 13 July 2018

XXI. **Enhancement in blue LEDs with step graded electron injectors by InGaN stress compensation layers**
Sheremet V., Gheshlaghi N., Sözen M., Elçi M., Sheremet N., AYDINLI A., ALTUNTAŞ İ., ding K., Avrutin V., Özgür Ü., et al.
19th International Conference on Metalorganic Vapor Phase Epitaxy (ICMOVPE-XIX), 3 - 08 June 2018

XXII. **GROWTH AND CHARACTERIZATION STUDY ON STRAIN BALANCED QUANTUM CASCADE LASER STRUCTURES**
DEMİR İ., ALTUNTAŞ İ., ELAGÖZ S.
4th International Conference on Engineering and Natural Sciences (ICENS), 2 - 06 May 2018

XXIII. **EFFECT OF V/III RATIO ON C-PLANE GAN LAYERS WITH TWO STAGES HT-GAN**
ALTUNTAŞ İ., DEMİR İ., ELAGÖZ S.
4th International Conference on Engineering and Natural Sciences (ICENS), 2 - 06 May 2018

XXIV. **Defect Reduction of Epitaxially Grown GaN Layer on Patterned Sapphire Substrate**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., BULUT B., ELAGÖZ S.

UV LED Technologies & Applications ICULTA -2018, 22 - 25 April 2018

XXV. **High quality nitride materials (AlN and AlGaN) on Si and sapphire substrates and UV-LED applications**
DEMİR İ., Li H., Robin Y., McClintock R., ALTUNTAŞ İ., ELAGÖZ S., Zekentes K., Razeghi M.
8th International Conference and Exhibition on Lasers, Optics Photonics, LasVegas, United States Of America, 15 - 17 November 2017, vol.4, pp.149

XXVI. **The Effects of Two Stages GaN Growth with Different V/III Ratios During 3D-2D Transition**
ALTUNTAŞ İ., DEMİR İ., ELAGÖZ S.
8th International Conference and Exhibition on LASERS, OPTICS PHOTONICS, Las Vegas, United States Of America, 15 - 17 November 2017

XXVII. **The Influences of Carrier Gas Flow on Crystal Quality of GaN**
DEMİR İ., ALTUNTAŞ İ., Bulut B., ELAGÖZ S.
Turkish Physical Society 33rd International Physics Congress, Bodrum/Muğla, Turkey, 6 - 10 September 2017

XXVIII. **Simulation of Highly Reflective GaN/AlxGa1-xN DBR Structure for UV-Blue LEDs**
ALAYDİN B. Ö., ALTUNTAŞ İ., ŞENADIM TÜZEMEN E., ELAGÖZ S.
4th INTERNATIONAL CONFERENCE ON MATERIALS SCIENCE AND NANOTECHNOLOGY FOR NEXT GENERATION (MSNG2017), 28 - 01 June 2017

XXIX. **Growth of High Quality InGaN/GaN Multi Quantum Well via MOCVD and Introducing a Technique for Precise Thickness Determination**
ALTUNTAŞ İ., DEMİR İ., ELAGÖZ S.
17th European Workshop on Metalorganic Vapour Phase Epitaxt (EW-MOVPE17), Greonable, France, 18 - 21 June 2017

XXX. **Using Source Delay Technique to Grow High Quality InAlAs/InGaAs superlattices by MOCVD**
DEMİR İ., ALTUNTAŞ İ., ELAGÖZ S.
17th European Workshop on Metalorganic Vapour Phase Epitaxt (EW-MOVPE17), Greonable, France, 18 - 21 June 2017

XXXI. **Optical Comparison of MOCVD Grown GaN Layers on Flat and Patterned Sapphire Substrates**
DEMİR İ., ALTUNTAŞ İ., KIZILBULUT A. A., BULUT B., ELAGÖZ S.
III International Conference on Engineering and Natural Science (ICENS), Budapest, Hungary, 3 - 07 May 2017

XXXII. **STUDY OF DEFECTS IN GAN EPILAYER GROWN ON PATTERNED SAPPHIRE SUBSTRATE**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., BULUT B., ERKUŞ M., ÇETİNKAYA A. O., ELAGÖZ S.
III International Conference on Engineering and Natural Science (ICENS), Budapest, Hungary, 3 - 07 May 2017

XXXIII. **Improved GaN Quality by Two Stages Ammonia Flow**
DEMİR İ., ALTUNTAŞ İ., BULUT B., KIZILBULUT A. A., ELAGÖZ S.
III International Conference on Engineering and Natural Science (ICENS), Budapest, Hungary, 3 - 07 May 2017

XXXIV. **Structural Comparison of Epitaxially Grown GaN Layer on Conventional Sapphire and Patterned Sapphire Substrates**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., BULUT B., ELAGÖZ S.
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XXXV. **Structural Comparison Of Epitaxially Grown Gan Layer On Conventional Sapphire And Patterned Sapphire Substrate**
ALTUNTAŞ İ., DEMİR İ., KIZILBULUT A. A., BULUT B., ELAGÖZ S.
3rd International Conference On Engineering And Natural Science Uluslararası, Macedonia, 05 May 2017

XXXVI. **High Quality InGaAs InAlAs Superlattices Growth by MOCVD**
DEMİR İ., Alaydın B. Ö., ALTUNTAŞ İ., ELAGÖZ S.
3th International Nanoscience and Nanotechnolgy for Next Generation, 20 - 23 October 2016

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