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Education Information

Doctorate, Saint-Petersburg State Technical University, Fizik, Russia 1987 - 1991

Postgraduate, Saint-Petersburg State Technical University, Fizik, Russia 1985 - 1987

Undergraduate, Semerkant Devlet Üniversitesi, Fizik, Uzbekistan 1975 - 1980

Biography

ÖZGEÇMİŞ VE ESERLER LİSTESİ

ÖZGEÇMİŞ

Adı Soyadı: Prof. Dr. Muhitdin AHMETOĞLU

Doğum Tarihi: 08 08 1958

Öğrenim Durumu:

Derece	Bölüm/Program	Üniversite	Yıl
Lisans	Fizik	Semerkant Devlet Üniversitesi	1980
Y. Lisans	Yarıiletken Fiziği	İoffe Fizik Teknik Araştırma Enstitüsü (Sankt-Petersburg, Rusya)	1987
Doktora/S.Yeterlik/ Tıpta Uzmanlık	Yarıiletken Fiziği	İoffe Fizik Teknik Araştırma Enstitüsü (Sankt-Petersburg, Rusya)	1991

Yüksek Lisans Tez Başlığı (özeti ekte) ve Tez Danışman(lar)ı :

Yarıiletkenler ve Dielektrikler Fiziği, İOFFE Fizik-Teknik Araş. Ens., SSCB Bilimler Akademisi, SSCB Danışman:
Doctor of Science Mikhailova M.P.

Doktora Tezi/S.Yeterlik Çalışması/Tıpta Uzmanlık Tezi Başlığı (özeti ekte) ve Danışman(lar)ı :

Yarıiletkenler ve Dielektrikler Fiziği, İOFFE Fizik-Teknik Araş. Ens., SSCB Bilimler Akademisi, SSCB Danışman:
Doctor of Science Mikhailova M.P.

Görevler:

Görev Unvanı	Görev Yeri	Yıl
Arş.Gör.	SSCB Bilimler Akademisi, İOFFE Fizik-Teknik Elektronlu Yarıiletkenler Laboratuvarı, Rusya	Araştırma Enst. St.Petersburg, 1985-1991
Öğr.Gör.Dr.	Namangan Devlet Üniversitesi, Fizik Fakültesi,	Özbekistan 1991-1992
Yrd.Doç.Dr.	Namangan Devlet Üniversitesi, Fizik Fakültesi,	Özbekistan 1992-1994
Doç.Dr.	Namangan Devlet Üniversitesi, Fizik Fakültesi,	Özbekistan 1994-1997
Doç.Dr.	Uludağ Üniversitesi, Fen-Ed. Fak., Fizik Bölümü yabancı uyruklu öğretim üyesi)	(sözleşmeli) 1997-2004
Yrd.Doç.Dr.	Uludağ Üniversitesi, Fen-Ed. Fak., Fizik Bölümü	2004-2006
Doç.Dr.	Uludağ Üniversitesi, Fen-Ed. Fak., Fizik Bölümü	2006-2012
Prof.Dr.	Uludağ Üniversitesi, Fen-Ed. Fak., Fizik Bölümü	2012-

Foreign Languages

Russian, B2 Upper Intermediate

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 2012 - Continues

Associate Professor, Bursa Uludağ University, FEN-EDEBİYAT FAKÜLTESİ, FİZİK, 2006 - Continues

Advising Theses

AHMETOĞLU M., Investigation of the electrical and optical properties of ni/n-gaas schottky diodes obtained by electrodeposition, Postgraduate, T.Batmaz(Student), 2020

AHMETOĞLU M., Investigation of the light homogeneity on position functions in automotive rear light products, Postgraduate, Y.Sevil(Student), 2020

AHMETOĞLU M., Electrical and optical properties of photodiode structures formed by surface polymerization of P[(EGDMA-VPCA)-SWCNT] films on n-GaAs and n-Si semiconductors, Postgraduate, B.Kirezli(Student), 2019

AHMETOĞLU M., Investigation of electrical and optical properties of low bandgap gainassb thermophotovoltaic structures, Doctorate, B.KUCUR(Student), 2017

AHMETOĞLU M., Investigation of electrical and optical properties of the structure formed by coating conductive polymer onto GaAs semiconductor, Doctorate, A.KIRSOY(Student), 2015

AHMETOĞLU M., Investigation of the properties of schottky diodes fabricated by coating a conductive polymer on silicon semiconductor, Doctorate, A.ASİMOV(Student), 2014

AHMETOĞLU M., Investigation of dark current mechanisms of GaSb based infrared photodiodes, Postgraduate, B.KUCUR(Student), 2011

AHMETOĞLU M., Examining the electrical properties of n-Si/Cu ,p-Si/Cu Schottky diodes formed by electrodeposition method, Postgraduate, B.GÜRPINAR(Student), 2008

AHMETOĞLU M., Investigation of electrical and photoelectric properties of N-GaSb / n-GaInAsSb / N-GaAlAsSb isotype heterostructures, Doctorate, M.ÖZER(Student), 2005

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Simple and cost-effective wavelength measurement system using photodiode pair: Applications in fiber coupled light sources**
AHMETOĞLU M., HACIİSMAİLOĞLU M. C., Kumbay E.
Measurement: Journal of the International Measurement Confederation, vol.244, 2025 (SCI-Expanded)
- II. **Narrow-band n-GaN/n-Si isotype heterojunction photodiode: A simplified approach for photodiode development**
Olkun A., Kaplan H. K., Akay S. K., Ahmetoğlu M., Pat S., Erdogan N.
SENSORS AND ACTUATORS A-PHYSICAL, vol.374, 2024 (SCI-Expanded)
- III. **A new prospect to measure the built-in potential for photodiodes**
HACIİSMAİLOĞLU M. C., AHMETOĞLU M.
Materials Science and Engineering: B, vol.298, 2023 (SCI-Expanded)
- IV. **Electrical and optical properties of Schottky diodes fabricated by electrodeposition of Ni films on n-GaAs**
HACIİSMAİLOĞLU M. C., AHMETOĞLU M., ŞAFAK HACIİSMAİLOĞLU M., ALPER M., Batmaz T.
Sensors and Actuators A: Physical, vol.347, 2022 (SCI-Expanded)
- V. **A novel self-powered filterless narrow-band near-infrared photodiode of Cu₂S/Si p(+)-p isotype heterojunction device with very low visible light noise**
Kaplan H. K., Akay S. K., Ahmetoğlu M.
APPLIED SURFACE SCIENCE, vol.601, 2022 (SCI-Expanded)
- VI. **Photodiodes for Detecting the Emission of Quantum-Sized Disc Lasers Operating in the Whispering Gallery Modes (2.2-2.3 μm)**
Kunitsyna E., Rozy M. A., Andreev I. A., Grebenshchikova E. A., Pivovarova A. A., Ahmetoglu (Afrailov) M., Lebiadok Y., Mikulich R. Y., Iliinskaya N. D., Yakovlev Y. P.

SEMICONDUCTORS, vol.54, pp.796-802, 2020 (SCI-Expanded)

- VII. **Electrical and optical properties of photodiode structures formed by surface polymerization of P(Egdma-Vpca)-Swcnt films on n-si**
Kirezli B., Gucuyener İ., Kara A., Kaplan H. K., Afrailov M.
JOURNAL OF MOLECULAR STRUCTURE, vol.1198, 2019 (SCI-Expanded)
- VIII. **Electrical and optical properties of photodiode structures formed by surface polymerization of [P (EGDMA-VPCA)-SWCNT] films on n-GaAs**
Kirezli B., Ahmetoglu (Afrailov) M., Kara A.
JOURNAL OF MOLECULAR STRUCTURE, vol.1192, pp.258-263, 2019 (SCI-Expanded)
- IX. **N+-GaSb / no-GaInAsSb / P+-GaSb type ii heterojunction photodiodes with low radiation damage**
Ahmetoglu Afrailov M., Kirezli B., Kaynak G., Andreev I., Kunitsyna E., Mikhailova M., Yakovlev Y. P.
Optoelectronics and Advanced Materials, Rapid Communications, vol.12, pp.517-520, 2018 (SCI-Expanded)
- X. **Photoelectrical properties of fabricated ZnS/Si heterojunction device using thermionic vacuum arc method**
Kaplan H. K., Akay S. K., Ahmetoglu M.
SUPERLATTICES AND MICROSTRUCTURES, vol.120, pp.402-409, 2018 (SCI-Expanded)
- XI. **N-GaSb / no-GaInAsSb / P- GaSb Type II Heterojunction Photodiodes with Low Radiation Damage**
Ahmetoğlu M., Kirazlı B., Kaynak G., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
Optoelectronics And Advanced Materials-Rapid Communications, pp.606-611, 2018 (SCI-Expanded)
- XII. **The characteristics of ZnS/Si heterojunction diode fabricated by thermionic vacuum arc**
Kaplan H. K., Sarsici S., Akay S. K., Ahmetoglu M.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.724, pp.543-548, 2017 (SCI-Expanded)
- XIII. **The electrical properties of Au/MEH-PPV:PCBM/n-type GaAs schottky barrier diode**
Ahmetoglu (Afrailov) M., Kirsoy A., Asimov A., Kucur B.
Optoelectronics and Advanced Materials, Rapid Communications, vol.10, pp.825-830, 2016 (SCI-Expanded)
- XIV. **Electrical Properties Inorganic-on-Organic Hybrid GaAs/Graphene Oxide Schottky Barrier Diode**
Ahmetoğlu M., Kirsoy A., Okutan M., Yakuphanoglu F.
Optoelectronics And Advanced Materials-Rapid Communications, pp.108-114, 2016 (SCI-Expanded)
- XV. **Poly(ethylene glycol dimethacrylate-co-1-vinyl-1,2,4-triazole/ carbon nanotube, single-walled)/n-GaAs Diode Formed by Surface Polymerization**
Ahmetoglu M., Kara A., Kucur B.
ACTA PHYSICA POLONICA A, vol.130, no.1, pp.206-208, 2016 (SCI-Expanded)
- XVI. **The Electrical Properties of Au/P3HT/n-Type Si Schottky Barrier Diode**
Asimov A., Ahmetoglu M., Kirsoy A., Ozer M., Yasin M.
JOURNAL OF NANOELECTRONICS AND OPTOELECTRONICS, vol.11, no.2, pp.214-218, 2016 (SCI-Expanded)
- XVII. **Electrical Characteristics and Temperature Dependence of Photovoltaic Parameters of GaInAsSb Based TPV Diode**
Kucur B., Ahmetoglu M., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
ACTA PHYSICA POLONICA A, vol.129, pp.767-769, 2016 (SCI-Expanded)
- XVIII. **The Electrical Properties of Au/P3HT/n-GaAs Schottky Barrier Diode**
Kirsoy A., Ahmetoglu (Afrailov) M., Asimov A., Kucur B.
ACTA PHYSICA POLONICA A, vol.128, 2015 (SCI-Expanded)
- XIX. **Electrical and Optical Characteristics of n-GaSb/n-GaIn0.24AsSb/p-GaAl0.34AsSb Heterostructure Photodiode**
Ahmetoglu M., Kucur B., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
ACTA PHYSICA POLONICA A, vol.127, no.4, pp.1007-1009, 2015 (SCI-Expanded)
- XX. **Electrical Properties of GaInAsSb/GaSb/GaAlAsSb Double Heterostructure with Low Diameter**
Kucur B., Ahmetoglu M., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
ACTA PHYSICA POLONICA A, vol.125, no.2, pp.411-413, 2014 (SCI-Expanded)
- XXI. **Electrical characteristics of Al/n-type GaAs schottky barrier diodes at room temperature**
Asimov A., Ahmetoglu M., Kucur B., Gucuyener I.

- Optoelectronics and Advanced Materials, Rapid Communications, vol.8, pp.309-310, 2014 (SCI-Expanded)
- XXII. **The determination of electronic parameters of Al/MDMO-PPV/P-Si/Al Schottky diode by current-voltage characteristics**
Asimov A., Ahmetoglu (Afrailov) M.
Optoelectronics and Advanced Materials, Rapid Communications, vol.8, pp.975-979, 2014 (SCI-Expanded)
- XXIII. **Gaussian Distribution of inhomogeneous barrier height in Au/n-GaP (100) Schottky barrier diodes**
Ozer M., Guzel T., Asimov A., Ahmetoglu (Afrailov) M.
Journal of Optoelectronics and Advanced Materials, vol.16, pp.606-611, 2014 (SCI-Expanded)
- XXIV. **Determination of Carrier Concentrations in P-GaSb/n-InGaAsSb Type II Misaligned Heterojunctions by the Conductivity-Magnetic Field Dependence**
AHMETOĞLU M., Kucur B.
SENSOR LETTERS, vol.11, no.1, pp.202-204, 2013 (SCI-Expanded)
- XXV. **The determination of series resistance and interface state density distributions of Au/p-type GaAs Schottky barrier diodes**
Asimov A., Ahmetoglu (Afrailova) M., Kucur B., Ozer M., Guzel T.
Optoelectronics and Advanced Materials, Rapid Communications, vol.7, pp.490-493, 2013 (SCI-Expanded)
- XXVI. **Electrical properties of GaAs-GaAlAs near infrared light emitting diodes**
AHMETOĞLU M., Kucur B., GÜCÜYENER İ.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.6, pp.782-784, 2012 (SCI-Expanded)
- XXVII. **Photoelectrical characteristics of GaSb/GaInAsSb/GaAlAsSb heterojunction photodiodes under illumination by photons with wavelength of 0.95-1.0 μm**
Afrailov M.
THIN SOLID FILMS, vol.520, no.15, pp.5014-5017, 2012 (SCI-Expanded)
- XXVIII. **Electrical properties of Poly(ethylene glycol dimethacrylate-n-vinyl imidazole)/Single Walled Carbon Nanotubes/n-Si Schottky diodes formed by surface polymerization of Single Walled Carbon Nanotubes**
AHMETOĞLU M., KARA A., TEKİN N., Beyaz S., KÖÇKAR H.
THIN SOLID FILMS, vol.520, no.6, pp.2106-2109, 2012 (SCI-Expanded)
- XXIX. **Electrical and optical characteristics of the InAs/InAs_{0.7}Sb_{0.1}P_{0.2} single heterojunction photodiodes for the spectral range 1.6-3.5 μm**
Ahmetoglu (Afrailov) M., Andreev I. A., Kunitsyna E. V., Moiseev K. D., Mikhailova M. P., Yakovlev Y. P.
INFRARED PHYSICS & TECHNOLOGY, vol.55, no.1, pp.15-18, 2012 (SCI-Expanded)
- XXX. **The electrical characterization of electrodeposited Ni thin film on silicon: Schottky Barrier diodes**
AHMETOĞLU M., Tekgul A., ALPER M., Kucur B.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.6, pp.304-306, 2012 (SCI-Expanded)
- XXXI. **Narrow gap III-V materials for infrared photodiodes and thermophotovoltaic cells**
Kunitsyna E. V., Andreev I. A., Sherstnev V. V., L'vova T. V., Mikhailova M. P., Yakovlev Y. P., Ahmetoglu (Afrailov) M., Kaynak G., Gurler O.
OPTICAL MATERIALS, vol.32, no.12, pp.1573-1577, 2010 (SCI-Expanded)
- XXXII. **Electrical and optical properties of the GaInAsSb-based heterojunctions for infrared photodiode and thermophotovoltaic cell application**
Ahmetoglu (Afrailov) M., Kucur B., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
INFRARED PHYSICS & TECHNOLOGY, vol.53, no.5, pp.399-403, 2010 (SCI-Expanded)
- XXXIII. **Dark currents in GaInAsSb based heterojunction photodiodes with a low diameter area at low temperatures**
Ahmetoglu (Afrailov) M.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.4, no.4, pp.441-444, 2010 (SCI-Expanded)
- XXXIV. **Determination of the parameters for the back-to-back switched Schottky barrier structures**

- Ahmetoglu M., Akay S. K.
CURRENT APPLIED PHYSICS, vol.10, no.2, pp.652-654, 2010 (SCI-Expanded)
- XXXV. **Photoelectrical characteristics of the InAsSbP based uncooled photodiodes for the spectral range 1.6-3.5 μm**
Afrailov M.
INFRARED PHYSICS & TECHNOLOGY, vol.53, no.1, pp.29-32, 2010 (SCI-Expanded)
- XXXVI. **TO THE THEORY OF ELECTROMOTIVE FORCE GENERATED IN POTENTIAL BARRIER AT ULTRAHIGH FREQUENCY FIELD**
Ahmetoglu (Afrailov) M., Kaynak G., Shamirzaev S., Gulyamov G., Gulyamov A., Dadamirzaev M. G., Boydeda S. R., Aprailov N.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.23, no.15, pp.3279-3285, 2009 (SCI-Expanded)
- XXXVII. **Photoelectrical properties of InP-InGaAsP heterojunction avalanche photodiodes**
Ahmetoglu M., Ozer M., Kadirov O.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.3, no.6, pp.608-611, 2009 (SCI-Expanded)
- XXXVIII. **Current transport in GaSb /GaInAsSb/GaAlAsSb heterojunction photodiodes**
Ahmetoglu (Afrailov) M.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.3, no.6, pp.604-607, 2009 (SCI-Expanded)
- XXXIX. **Electron-hole interaction in spherical quantum dots of nanoheterostructures**
Ahmetoglu (Afrailov) M., Akay S. K., Boymatov P., Inoyatov S., Ahmedov O., Rahimov N., Pulatov A.
Optoelectronics and Advanced Materials, Rapid Communications, vol.3, no.3, pp.163-165, 2009 (SCI-Expanded)
- XL. **Electrical Properties of Photodiodes Based on p-GaSb/p-GaInAsSb/N-GaAlAsSb Heterojunctions**
Ahmetoglu M., Kaynak G., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
TECHNICAL PHYSICS LETTERS, vol.34, no.11, pp.937-940, 2008 (SCI-Expanded)
- XLI. **Dark currents in GaSb/GaInAsSb heterojunction photodiodes at high temperatures**
Ahmetoglu (Afrailov) M.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.10, no.10, pp.2507-2510, 2008 (SCI-Expanded)
- XLII. **Photocurrent amplification in a isotype N+-GaSb/n(0)-GaInAsSb type II heterojunctions**
Ahmetoglu (Afrailov) M.
INFRARED PHYSICS & TECHNOLOGY, vol.51, no.6, pp.491-494, 2008 (SCI-Expanded)
- XLIII. **Temperature dependence of electrical characteristics of Cr/p-Si(100) Schottky barrier diodes**
Erturk K., HACIİSMAİLOĞLU M. C., Bektore Y., Ahmetoglu M.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.22, no.14, pp.2309-2319, 2008 (SCI-Expanded)
- XLIV. **Temperature dependence of electrical characteristics of Cu/n-Si Schottky barrier diodes formed by electrodeposition**
Ahmetoglu M., Erturk K.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.10, no.2, pp.298-301, 2008 (SCI-Expanded)
- XLV. **Electrical transport at a isotype type II heterojunctions in the system of GaSb-GaInAsSb**
Ahmetoglu (Afrailov) M.
THIN SOLID FILMS, vol.516, no.6, pp.1227-1231, 2008 (SCI-Expanded)
- XLVI. **Photoelectrical characteristic of isotype N+-GaSb / no-GaInAsSb / N+- GaAlAsSb type II heterojunctions**
AHMETOĞLU M., ÖZER M. H., Kadirov O., Boydedayev S.
Journal of Optoelectronics and Advanced Materials, vol.10, no.10, pp.2511-2514, 2008 (SCI-Expanded)
- XLVII. **Dark currents in the uncooled InAs/InAsSbP photodiodes for the spectral range 1.6-3.5 μm**
Ahmetoglu M.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.11, pp.3567-3570, 2007 (SCI-Expanded)
- XLVIII. **Electrical properties of n-Si/Cu Schottky diodes formed by electrodeposition**
Ahmetoglu (Afrailov) M., Alper M., Safak M., Erturk K., Gurpinar B., Kocak F., Hacıismailoglu C.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, no.4, pp.818-821, 2007 (SCI-Expanded)

- XLIX. Avalanche photodiodes for electromagnetic calorimeters**
 Pilicer E., Kocak F., Tapan İ., Ahmetoglu (Afrailov) M.
 NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
 DETECTORS AND ASSOCIATED EQUIPMENT, no.1, pp.120-121, 2007 (SCI-Expanded)
- L. Electrical properties of isotype N+-GaSb/n(0)-GaInAsSb/N+-GaAlAsSb type-II heterojunctions**
 Ahmetoglu M., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P.
 SEMICONDUCTORS, vol.41, no.2, pp.150-154, 2007 (SCI-Expanded)
- LI. Electrical properties of n-Si /Cu Schottky diodes formed by electrodeposition**
 AHMETOĞLU M., ALPER M., Safak M., Erturk K., Gurpinar B., KOÇAK F., HACIİSMAİLOĞLU M. C.
 Journal of Optoelectronics and Advanced Materials, vol.9, no.4, pp.818-821, 2007 (SCI-Expanded)
- LII. Change in the resistance of the semiconductor in the variable deformation field**
 Ahmetoglu (Afrailov) M., Gulyamov G., Shamirzaev S. H., Gulyamov A. G., Dadamirzaev M. G., Aprailov N., Kocak F.
 ROMANIAN JOURNAL OF PHYSICS, vol.52, pp.343-351, 2007 (SCI-Expanded)
- LIII. Dark currents in the uncooled InAs / InAsSbP photodiodes for the spectral range 1.6 - 3.5 μm**
 AHMETOĞLU M.
 Journal of Optoelectronics and Advanced Materials, vol.9, no.11, pp.3567-3570, 2007 (SCI-Expanded)
- LIV. A ZnS-Si isotype heterojunction avalanche photodiode structure for scintillation light detection**
 Tapan İ., Ahmetoglu(Afrailov) M., Kocak F.
 NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
 DETECTORS AND ASSOCIATED EQUIPMENT, no.1, pp.268-271, 2006 (SCI-Expanded)
- LV. Dark currents and impact ionization coefficients in the InP-InGaAsP double heterostructures**
 Ozer M., Ahmetoglu M., Aprailov N.
 INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.20, no.29, pp.4929-4936, 2006 (SCI-Expanded)
- LVI. Electrical and photoelectrical properties of isotype N+-GaSb/n(0)-GaInAsSb type II heterojunctions**
 Afrailov M.
 INFRARED PHYSICS & TECHNOLOGY, vol.45, no.3, pp.169-175, 2004 (SCI-Expanded)
- LVII. Optical Moisture Meter Based on GaInAsSb Led's and Photodiodes**
 Akay C., Ahmetoğlu M., Özer M.
 Romanian Journal Of Physics, vol.49, no.34, pp.251-256, 2004 (SCI-Expanded)
- LVIII. A ZnS-Si hetero-junction photodiode for short wavelength photon detection**
 Tapan İ., Afrailov M.
 NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS
 DETECTORS AND ASSOCIATED EQUIPMENT, no.1-2, pp.92-96, 2003 (SCI-Expanded)
- LIX. Type II GaSb based photodiodes operating in spectral range 1.5-4.8 μm at room temperature**
 Mikhailova M., Stoyanov N., Andreychuk O., Moiseev K., Andreev I., Yakovlev Y., Afrailov M.
 IEE PROCEEDINGS-OPTOELECTRONICS, vol.149, no.1, pp.41-44, 2002 (SCI-Expanded)
- LX. Photodiodes for a 1.5-4.8 μm spectral range based on type-II GaSb/InGaAsSb heterostructures**
 Stoyanov N., Mikhailova M., Andreichuk O., Moiseev K., Andreev I., Afrailov M., Yakovlev Y.
 SEMICONDUCTORS, vol.35, no.4, pp.453-458, 2001 (SCI-Expanded)
- LXI. Temperature Dependence of Photo VAC of Vidicon Target on the Base of a-Si:H**
 Ahmetoğlu M., Tapan I., Bobohadjaev U.
 Romanian Journal Of Physics, no.27, pp.183-186, 2000 (SCI-Expanded)
- LXII. Determination of the values of band-edge discontinuities ΔEv and ΔEc at the heterojunction of N-GaSb/n-GaInAsSb isotype structures by photovoltaic method**
 Afrailov M., Mikhailova M., Rahimov N.
 Turkish Journal of Physics, vol.21, no.12, pp.1229-1232, 1997 (SCI-Expanded)
- LXIII. NARROW-GAP TYPE-II HETEROJUNCTIONS MADE OF GASB-INAS SOLID-SOLUTIONS**
 AFRAILOV M., BARANOV A., DMITRIEV A., MIKHAILOVA M., SMORCHKOVA Y., TIMCHENKO I., SHERSTNEV V.,
 YAKOVLEV Y., YASSIEVICH I.
 SOVIET PHYSICS SEMICONDUCTORS-USSR, vol.24, no.8, pp.876-882, 1990 (SCI-Expanded)
- LXIV. UNCOOLED PHOTODIODES BASED ON INAS/INASSBP FOR THE SPECTRAL RANGE OF 2-3,5 μm**

ANDREEV I., AFRAILOV M., BARANOV A., MIKHAILOVA M., MOISEEV K., TIMCHENKO I., SHESTNEV V., UMANSKII V., YAKOVLEV Y.

PISMA V ZHURNAL TEKHNICHESKOI FIZIKI, vol.16, no.4, pp.27-32, 1990 (SCI-Expanded)

LXV. **LOW-NOISE CUMULATIVE PHOTODIODES WITH SEPARATED AREAS OF ABSORPTION AND MULTIPLICATION FOR THE 1.6-2.4-MU-M SPECTRUM RANGE**

ANDREEV I., AFRAILOV M., BARANOV A., MARINSKAYA N., MIRSAGATOV M., MIKHAILOVA M., YAKOVLEV Y.

PISMA V ZHURNAL TEKHNICHESKOI FIZIKI, vol.15, no.17, pp.71-76, 1989 (SCI-Expanded)

LXVI. **SUPERFAST-RESPONSE GAINASSB-BASED P-1-N PHOTODIODE FOR SPECTRAL RANGE OF 1,5-2,3 MU-M**

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LXVII. **GAINASSB/GAALASSB-BASED AVALANCHE PHOTODIODE WITH SEPARATED ABSORPTION AND MULTIPLICATION AREAS**

ANDREEV I., AFRAILOV M., BARANOV A., MIRSAGATOV M., MIKHAILOVA M., YAKOVLEV Y.

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LXVIII. **AVALANCHE MULTIPLICATION IN PHOTODIODE STRUCTURES, BASED ON GAINASSB SOLID-SOLUTIONS**

ANDREEV I., AFRAILOV M., BARANOV A., MIRSAGATOV M., MIKHAILOVA M., YAKOVLEV Y.

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PISMA V ZHURNAL TEKHNICHESKOI FIZIKI, vol.12, no.21, pp.1311-1315, 1986 (SCI-Expanded)

Articles Published in Other Journals

I. **OPTICAL MOISTURE METER BASED on GaInAsSb LED's and PHOTODIODES**

AHMETOĞLU M., AKAY C., ÖZER M.

ROMANIAN JOURNAL IN PHYSICS, vol.49, pp.251-256, 2004 (Peer-Reviewed Journal)

II. **DARK CURRENT-VOLTAGE CHARACTERISTICS of a DOUBLE TYPE II HETEROJUNCTION BASED on ISOTYPE N+-GaSb/n0-GaInAsSb/N+-GaAlAsSb STRUCTURES**

AHMETOĞLU M., ÖZER M., APRAILOV N.

ROMANIAN JOURNAL IN PHYSICS, vol.49, pp.257-264, 2004 (Peer-Reviewed Journal)

III. **InP/GaXIn1-XAs1-YPY LED DİYOTUN KARANLIK AKIM MEKANİZMASININ İNCELENMESİ**

ÖZER M., AHMETOĞLU M.

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.8, no.2, pp.207-210, 2004 (Peer-Reviewed Journal)

IV. **DARK CURRENT ANALYSIS of ISOTYPE N-GaSb/n-GaInAsSb SINGLE HETEROJUNCTIONS**

AHMETOĞLU M., ÖZER M., PİLİÇER E.

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Refereed Congress / Symposium Publications in Proceedings

I. **Photodiodes for detection of IR radiation from WGM lasers**

Ahmetoğlu M., Kunitsyna E., Andreev I., Konovalov G., Yakovlev Y., Lebiadok Y., Kirezli B.

ALT(Advanced Laser Technology) KONGRESİ -2019, Praha, Czech Republic, 15 - 20 September 2019

II. **Mid-Infrared Photonics: LEDs and Photodiodes for Sensing Applications**

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- III. **THE ELECTRICAL AND OPTICAL CHARACTERIZATION OF ELECTRODEPOSITED Ni /n-GaAs SCHOTTKY BARRIER DIODES**
Batmaz T., Kirezli B., Şafak Hacismailoğlu M., Alper M., Ahmetoğlu M.
3rd International Conference on Organic Electronic Material Technologies (OEMT2018), Kırklareli, Turkey, 20 - 22 September 2018
- IV. **ELECTRICAL AND OPTICAL PROPERTIES OF PHOTODIODE STRUCTURES FORMED BY SURFACE POLYMERIZATION OF P (EGDMA-VPCA)/SWCNT FILMS ON n-Si**
Kirazlı B., GÜCÜYENER İ., KARA A., AHMETOĞLU M.
3rd International Conference on Organic Electronic Material Technologies (OEMT2018), Kırklareli, Turkey, 20 - 22 September 2018, pp.308-322
- V. **PHOTOELECTRICAL PROPERTIES OF Ag/n-GaAs SCHOTTKY DIODES**
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3rd International Conference on Organic Electronic Material Technologies, Kırklareli, Turkey, 20 - 22 September 2018
- VI. **Electrical and Optical Properties of Photodiode Structures Formed by Surface Polymerization of P(EGDMAVPCA)/SWCNT Films on N-GaAs**
Kirezli B., AHMETOĞLU M., KARA A.
3rd International Conference on Organic Electronic Material Technologies(OEMT2018), 20 - 22 September 2018
- VII. **Poly Ethylene glycol dimethacrylate co 1 Vinyl 1 2 4 triazole carbon nanotube single walled n GaAs Diode Formed by Surface Polymerization**
AHMETOĞLU M., KARA A., KUCUR B.
2nd International Conference on Computational and Experimental Science and Engineering ICCES-2015, 14 - 19 October 2015
- VIII. **Electrical Characteristics and Temperature Dependence of Photovoltaic Parameters of GaInAsSb Based TPV Diode**
KUCUR B., AHMETOĞLU M., Andreev I., Kunitsyna E., Mikhailova M., Yakovlev Y.
5th International Advances in Applied Physics and Materials Science Congress & Exhibition, 16 - 19 April 2015
- IX. **Temperature Dependence of Electrical Characteristics of Ag/N-GaAs Schottky Barrier Diodes**
Kucur B., Ahmetoğlu M., Akay S. K., Ertürk K., Özer M.
International Semiconductor Science and Technology Conference, İstanbul, Turkey, 13 - 15 January 2014
- X. **Gallium antimonide - Based photodiodes and thermophotovoltaic devices**
Afrailov M., Andreev I. A., Kunitsyna E. V., Mikhailova M. P., Yakovlev Y. P., Erturk K.
6th International Conference of the Balkan-Physical-Union, İstanbul, Turkey, 22 - 26 August 2006, vol.899, pp.447-448
- XI. **Electrical and photoelectrical properties of isotype N+-GaSb/n(0)-GaInAsSb/N+-GaAlAsSb double heterojunctions**
Afrailov M., Ozer M.
7th International Workshop on Expert Evaluation and Control of Compound Semiconductor Materials and Technologies, Montpellier, France, 1 - 04 June 2004, vol.2, pp.1393-1398

Supported Projects

Ahmetoğlu M., Kumbay E., TUBITAK Project, Ultra-Fast Laser System with Real Time Wavelength Measurement System, 2018 - 2020

Ahmetoğlu M., Kumbay E., TUBITAK Project, 3D Layered Production System Design and Prototype Manufacturing Working by Melting Micro-Scale Metal Powders with a High Power Laser, 2018 - 2019

AHMETOĞLU M., Industrial Thesis Project, Fiber İletimli Lazer Diyot Birleştirici ve Fiber Lazer Rezonatörü Birleştirici Tasarımı ve Prototip İmalatı, 2016 - 2019

Hacismailoğlu M. C., Altınölçek N., Özer M., Ahmetoğlu M., Tavashlı M., Karamangil M. İ., Project Supported by Higher

Education Institutions, ORGANİK IŞIK YAYAN DİYOT OLED VE ORGANİK GÜNEŞ PİLLERİ ÜRETİMİ VE KARAKTERİZASYONU, 2015 - 2017

Ahmetoğlu M., İleri K., TUBITAK Project, MODULAR 2kW CW FIBER LASER RESONATOR PRODUCTION, 2014 - 2017

KARA A., AHMETOĞLU M., AKAY S. K., PEKSÖZ A., Project Supported by Higher Education Institutions, Yeni Sınıf İletken ve Manyetik Polimerik İnce Filmlerin Hazırlanması ve Elektrik Manyetik Özelliklerinin İncelenmesi, 2012 - 2017

Ahmetoğlu M., İleri K., TUBITAK Project, Design and Prototype Manufacturing of 500 W CW Fiber Laser Resonator, 2013 - 2014

Ahmetoğlu M., Akay S. K., Project Supported by Private Organizations in Other Countries, High efficiency Thermophotovoltaic elements for conversion of thermal energy into electricity from low temperature sources at the 2-4 micrometeres spectral range, 2009 - 2011

Patent

Ahmetoğlu M., Kumbay E., A system for measuring the wavelength of high power lasers, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Registration Number: 2016/11982 , Standard Registration, 2020

Metrics

Publication: 85

Citation (WoS): 196

Citation (Scopus): 192

H-Index (WoS): 8

H-Index (Scopus): 9

Congress and Symposium Activities

The 16th International Conference on Crystal Growth (ICCG-16) in conjunction with The 14th International Conference on Vapor Growth and Epitaxy (ICVGE-14), Invited Speaker, Beijing, China, 2010

XXI International Scientific and Engineering Conference on Photoelectronics and Night-Vision Devices, Invited Speaker, Moscow, Russia, 2010

The International Conference on Physics of Optical Materials and Devices ICOM2009 , Invited Speaker, Herceg Novi, Montenegro, 2009

The 9th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2008

The 8th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2007

The 8th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2007

The 8th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2007

The 8th International Balkan Workshop on Applied Physic, Invited Speaker, Constanta, Romania, 2007

8th International Conference on Mid-Infrared Optoelectronics, Materials and Devices , Invited Speaker, Salzburg, Austria, 2007

The 6th International Conference of the Balkan Physical Union, Invited Speaker, İstanbul, Turkey, 2006

The 7th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2006

The 7th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2006

6th International Conference on Mid – Infrared Optoelectronics Materials and Devices, MIOMD – VI, Invited Speaker, Sankt-Peterburg, Russia, 2004

7th Expert Evaluation & Control of Compound Semiconductor Materials & Technologies, Invited Speaker, Montpellier, France, 2004

The 4th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2003

The 4th International Balkan Workshop on Applied Physics, Invited Speaker, Constanta, Romania, 2003
The Third International Balkan Workshop on Applied Physics, Invited Speaker, Targu-Mures, Romania, 2002
Symposium on Applications of Particle Detectors in Medicine, Biology and Astrophysics II, Invited Speaker, Trieste, Italy, 2002
Fourth International Conference MID-INFRARED OPTOELECTRONICS Materials and Devices, Supported by the European Commission Research DG, Human Potential Program, High-Level Scientific Conference n02000-00194, Invited Speaker, Montpellier, France, 2001
Fourth General Conference of the Balkan Physics Union, Invited Speaker, Veliko Turnovo, Bulgaria, 2000
Fourth General Conference of the Balkan Physics Union, Invited Speaker, Veliko Turnovo, Bulgaria, 2000
International SPIE conference on Photoelectrical Devices, Invited Speaker, Moscow, Russia, 2000
International workshop on Solid State and Plasma Physics, Invited Speaker, Kocaeli, Turkey, 1999
International workshop on Solid State and Plasma Physics, Invited Speaker, Kocaeli, Turkey, 1999

Non Academic Experience

Namangan Devlet Üniversitesi
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