Asst. Prof. YOSEF BADALI

Personal Information

Email: ybedeli@ticaret.edu.tr
Web: https://avesis.ticaret.edu.tr/ybedeli

International Researcher IDs
ORCID: 0000-0001-7723-4188
ScopusID: 57194456802
Yoksis Researcher ID: 371209

Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), Turkey 2016 - 2019
Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), Turkey 2012 - 2015
Undergraduate, University Of Mohaghegh Ardabili, Iran 2004 - 2008

Dissertations

Doctorate, Farklı x materyaller kullanılarak Au/(Bi2O3-x:PVA)/4H-SiC yapıların hazırlanması, elektriksel ve dielektrik özelliklerin incelenmesi, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2019
Postgraduate, Grafen, bor ve nadir toprak elementleriyle katkılanmış poliviniliden florür nanokompozit piezo malzemelerin üretimi ve karakterizasyonu, Gazi University, Fen Bilimleri Enstitüsü, İleri Teknolojiler Anabilim Dalı (Disiplinlerarası), 2015

Research Areas

Physics, Natural Sciences, Engineering and Technology

Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Kastamonu Üniversitesi, June, 2023
Post Graduate, Post Graduate, Kastamonu Üniversitesi, June, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

I. **The influence of the physicochemical processes on the electrical response of Al/p-Si structure with etched surface**
BADALI Y., AZIZIAN-KALANDARAGH Y.
Applied Physics A: Materials Science and Processing, vol.130, no.4, 2024 (SCI-Expanded)
II. **Electrical properties of PVC:BN nanocomposite as interfacial layer in metal-semiconductor structure**
BADALI Y.

Journal of Materials Science: Materials in Electronics, vol.35, no.7, 2024 (SCI-Expanded)

III. **The photoresponse behavior of a Schottky structure with a transition metal oxide-doped organic polymer (RuO2:PVC) interface**
Elamen H., BADALI Y., ULUSOY M., AZIZIAN-KALANDARAGH Y., ALTINDAL Ş., Güneşer M. T.
Polymer Bulletin, vol.81, no.1, pp.403-422, 2024 (SCI-Expanded)

IV. **Characterization of the electrical properties of MPS schottky structures incorporating Fe doped polyvinyl chloride (PVC)**
BADALI Y.
Physica Scripta, vol.99, no.1, 2024 (SCI-Expanded)

V. **Thermal dependence on electrical characteristics of Au/(PVC:Sm2O3)/n-Si structure**
BADALI Y., Altan H., ALTINDAL Ş.
Journal of Materials Science: Materials in Electronics, vol.35, no.3, 2024 (SCI-Expanded)

VI. **Analysis of a spiral-formed solar air heating system with ceria nanoparticles-enhanced absorber coating**
Khanlari A., BADALI Y., Tuncer A. D.
Journal of Building Engineering, vol.71, 2023 (SCI-Expanded)

VII. **Frequency dependent electrical and dielectric properties of the Au/(RuO2:PVC)/n-Si (MPS) structures**
Güneşer M. T., Elamen H., BADALI Y., Altíndal Ş.
Physica B: Condensed Matter, vol.657, 2023 (SCI-Expanded)

VIII. **Numerical and experimental investigation for enhancing thermal performance of a concentric heat exchanger using different scenarios**
Aytaç İ., BADALI Y., Tuncer A. D.
International Journal of Numerical Methods for Heat and Fluid Flow, vol.33, no.6, pp.2100-2127, 2023 (SCI-Expanded)

IX. **The temperature-dependent dielectric properties of the Au/ZnO-PVA/n-Si structure**
AZIZIAN-KALANDARAGH Y., BADALI Y., Jamshidi-Ghozlu M., Hanife F., ÖZÇELİK S., ALTINDAL Ş., Pirgholi-Givi G.
Physica B: Condensed Matter, vol.650, 2023 (SCI-Expanded)

X. **The capacitance/conductance and surface state intensity characteristics of the Schottky structures with ruthenium dioxide-doped organic polymer interface**
ULUSOY M., BADALI Y., Pirgholi-Givi G., AZIZIAN-KALANDARAGH Y., ALTINDAL Ş.
Synthetic Metals, vol.292, 2023 (SCI-Expanded)

XI. **21.2 mV/K High-Performance Ni(50 nm)-Au(100 nm)/Ga2O3/p-Si Vertical MOS Type Diode and the Temperature Sensing Characteristics with a Novel Drive Mode**
Cicek O., Arslan E., ALTINDAL Ş., BADALI Y., Ozbay E.
IEEE Sensors Journal, vol.22, no.24, pp.23699-23704, 2022 (SCI-Expanded)

XII. **Vertical CdTe:PVP/p-Si-Based Temperature Sensor by Using Aluminum Anode Schottky Contact**
ÇETİNKAYA H. G., Cicek O., ALTINDAL Ş., BADALI Y., Demirezen S.
IEEE Sensors Journal, vol.22, no.23, pp.22391-22397, 2022 (SCI-Expanded)

XIII. **Plasma-enhanced atomic layer deposition of amorphous Ga2O3 gate dielectrics**
BADALI Y., Arslan E., Ulusoy T. G., ÖZÇELİK S., Özbay E.
Journal of Physics and Chemistry of Solids, vol.170, 2022 (SCI-Expanded)

XIV. **Graphene doped (Bi2Te3–Bi2O3–TeO2): PVP dielectrics in metal–semiconductor structures**
BADALI Y., Farazin J., Pirgholi-Givi G., ALTINDAL Ş., Azizian-Kalandaragh Y.
Applied Physics A: Materials Science and Processing, vol.127, no.9, 2021 (SCI-Expanded)

XV. **Current transport properties of (Au/Ni)/HfAlO3/n-Si metal–insulator–semiconductor junction**
Arslan E., BADALI Y., Aalizadeh M., ALTINDAL Ş., Özbay E.
Journal of Physics and Chemistry of Solids, vol.148, 2021 (SCI-Expanded)

XVI. **The possible current-conduction mechanism in the Au/(CoSO4-PVP)/n-Si junctions**
Elamen H., BADALI Y., Güneşer M. T., ALTINDAL Ş.
Journal of Materials Science: Materials in Electronics, vol.31, no.21, pp.18640-18648, 2020 (SCI-Expanded)

XVII. **Intersection behavior of the current–voltage (I–V) characteristics of the (Au/Ni)/HfAlO3/n-Si (MIS) structure depends on the lighting intensity**
Arslan E., BADALI Y., ALTINDAL Ş., Özbay E.
Journal of Materials Science: Materials in Electronics, vol.31, no.16, pp.13167-13172, 2020 (SCI-Expanded)

XVIII. **Investigation of the effect of different Bi2O3–x:PVA (x = Sm, Sn, Mo) thin insulator interface-layer materials on diode parameters**
BADALI Y., Azizian-Kalandaragh Y., Uslu İ., ALTINDAL Ş.
Journal of Materials Science: Materials in Electronics, vol.31, no.10, pp.8033-8042, 2020 (SCI-Expanded)

XIX. **Ultrasound-Assisted Method for Preparation of Ag2S Nanostructures: Fabrication of Au/Ag2S-PVA/n-Si Schottky Barrier Diode and Exploring Their Electrical Properties**
BADALI Y., Azizian-Kalandaragh Y., Akhlaghi E. A., ALTINDAL Ş.
Journal of Electronic Materials, vol.49, no.1, pp.444-453, 2020 (SCI-Expanded)

XX. **Dielectric properties of Ag/Ru 0.03 –PVA/n-Si structures**
BADALI Y., Koçyığıt S., Uslu I., ALTINDAL Ş.
Bulletin of Materials Science, vol.42, no.5, 2019 (SCI-Expanded)

XXI. **Synthesis of boron and rare earth stabilized graphene doped polyvinylidene fluoride (PVDF) nanocomposite piezoelectric materials**
BADALI Y., Koçyiğit S., AYTİMUR A., ALTINDAL Ş., Uslu İ.
Polymer Composites, vol.40, no.9, pp.3623-3633, 2019 (SCI-Expanded)

XXII. **Fabrication, structural and electrical characterization of Au/ (CuSe-polyvinyl alcohol)/n-Si (MPS) Schottky barrier structures**
Mirzanezhad-Asl R., Phirouznia A., ALTINDAL Ş., BADALI Y., Azizian-Kalandaragh Y.
Physica B: Condensed Matter, vol.561, pp.1-8, 2019 (SCI-Expanded)

XXIII. **Current-Transport Mechanisms of the Al/(Bi2S3-PVA Nanocomposite)/p-Si Schottky Diodes in the Temperature Range Between 220 K and 380 K**
Boughdachi S., BADALI Y., Azizian-Kalandaragh Y., ALTINDAL Ş.
Journal of Electronic Materials, vol.47, no.12, pp.6945-6953, 2018 (SCI-Expanded)

XXIV. **Formation of ZnO nanopowders by the simple ultrasound-assisted method: Exploring the dielectric and electric properties of the Au/(ZnO-PVA)/n-Si structure**
Nezhadesm-Kohardafchahi S., Farjami-Shayesteh S., BADALI Y., ALTINDAL Ş., Jamshidi-Ghozlu M., Azizian-Kalandaragh Y.
Materials Science in Semiconductor Processing, vol.86, pp.173-180, 2018 (SCI-Expanded)

XXV. **Preparation of mixed copper/PVA nanocomposites as an interface layer for fabrication of Al/Cu-PVA/p-Si Schottky structures**
Akhlaghi E. A., BADALI Y., ALTINDAL Ş., Azizian-Kalandaragh Y.
Physica B: Condensed Matter, vol.546, pp.93-98, 2018 (SCI-Expanded)

XXVI. **Effects of a Thin Ru-Doped PVP Interface Layer on Electrical Behavior of Ag/n-Si Structures**
BADALI Y., Nikravan A., ALTINDAL Ş., Uslu İ.
Journal of Electronic Materials, vol.47, no.7, pp.3510-3520, 2018 (SCI-Expanded)

XXVII. **Dielectric properties, electrical modulus and current transport mechanisms of Au/ZnO/n-Si structures**
BADALI Y., ALTINDAL Ş., Uslu İ.
Progress in Natural Science: Materials International, vol.28, no.3, pp.325-331, 2018 (SCI-Expanded)

XXVIII. **Facile ultrasound-assisted and microwave-assisted methods for preparation of Bi2S3-PVA nanostructures: exploring their pertinent structural and optical properties and comparative studies on the electrical, properties of Au/(Bi2S3-PVA)/n-Si Schottky structure**
Boughdachi S., Azizian-Kalandaragh Y., BADALI Y., ALTINDAL Ş.
Journal of Materials Science: Materials in Electronics, vol.28, no.23, pp.17948-17960, 2017 (SCI-Expanded)

XXIX. **On the Frequency and Voltage-Dependent Profiles of the Surface States and Series Resistance of Au/ZnO/n-Si Structures in a Wide Range of Frequency and Voltage**
Nikravan A., BADALI Y., ALTINDAL Ş., Uslu İ., Orak İ.

Journal of Electronic Materials, vol.46, no.10, pp.5728-5736, 2017 (SCI-Expanded)

XXX. **On the temperature dependent current transport mechanisms and barrier inhomogeneity in Au/SnO2–PVA/n-Si Schottky barrier diodes**
Bilkan Ç., BADALI Y., Fotouhi-Shablou S., Azizian-Kalandaragh Y., ALTINDAL Ş.
Applied Physics A: Materials Science and Processing, vol.123, no.8, 2017 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Electrical Characteristics and Photoconduction Behavior of the Au/Er2O3-PVC/n-Si Structure**
BADALI Y., ELAMEN H., GÜNEŞER M. T., ALTINDAL Ş.
2nd International Conference on Light and Light-Based Technologies, Ankara, Turkey, 26 May 2021

II. **The investigated electrical parameters of the Au/n-Si (MS) capacitor with different rate Gr-doped PVA interlayer**
BADALI Y., ALTINDAL Ş.
Proceedings of the International Conference on Technology and Science, Burdur, Turkey, 14 November 2019

III. **Dielectric properties and ac conductivity of the Au/n-Si (MS) capacitor with different rate Gr-doped PVA interlayer**
BADALI Y.
Proceedings of the International Conference on Technology and Science, Burdur, Turkey, 14 November 2019

IV. **The investigation of main electrical parameters and conduction mechanisms of Al/p-Si (MS) structures with various Zn3%-PVA interfacial layer thickness**
BADALI Y.
Proceedings of the International Conference on Technology and Science, Burdur, Turkey, 14 November 2019

V. **Interlayer Thickness Dependent Electrical Characteristics off Al/%3Zn doped PVA/p-Si MPS structures at Room Temperature**
BADALI Y., NİKRAVAN A., BİLGEN-BENLİ B., ALTINDAL Ş., USLU İ.
1st International Underground Resources and Energy Conference, Yozgat, Turkey, 06 October 2016

VI. **Influence Of Frequency And Applied Voltage On Dielectric Properties, Electric Modulus And Electrical Conductivity In Ag/%3Ru doped PVP/n-Si Structures**
KAYA G., BADALI Y., NİKRAVAN A., ALTINDAL Ş., USLU İ.
2 nd International Conference on Organic Electronic Material Technologies (OEMT2016), Çanakkale, Turkey, 17 May 2016

VII. **The investigation of electrical characteristics of Ag/Ru-doped pvp/n-Si structure as function of frequency at room temperature**
KAYA G., BADALI Y., NİKRAVAN A., ALTINDAL Ş., USLU İ.
International Physics Conference at the Anatolian Peak, Erzurum, Turkey, 25 February 2016

VIII. **Frequency and voltage dependence of the main electrical parameters of Au/ZnO/n-Si structures at room temperature.**
NİKRAVAN A., KAYA G., BADALI Y., ALTINDAL Ş., USLU İ.
International Physics Conference at the Anatolian Peak, Erzurum, Turkey, 25 February 2016

IX. **Influence of frequency and applied voltage on dielectric properties electric modules and electrical conductivity in Au/ZnO/n-Si structures**
BADALI Y., NİKRAVAN A., KAYA G., ALTINDAL Ş., USLU İ.
International Physics Conference at the Anatolian Peak, Erzurum, Turkey, 25 February 2016

Supported Projects

Project Supported by Other Private Institutions, GaN Jammer, 2020 - 2022

Scientific Refereeing

JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, October 2023
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, September 2023
JOURNAL OF COLLOID AND INTERFACE SCIENCE, Journal Indexed in SCI-E, August 2023
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, May 2023
JOURNAL OF COLLOID AND INTERFACE SCIENCE, Journal Indexed in SCI-E, April 2023
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, August 2022
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, June 2022
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, Journal Indexed in SCI-E, June 2021
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, April 2021
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, December 2020
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, November 2020
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, September 2020
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, May 2020
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, February 2020
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, September 2019
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, June 2019
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, February 2019
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, Journal Indexed in SCI-E, April 2018