



SEMA BİLGE OCAK

PROF.

Email : sbocak@gazi.edu.tr

Office Phone : [+90 505 580 0983](tel:+905055800983)

Learning Knowledge

Doctorate
1995 - 2000

Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey

Postgraduate
1992 - 1995

Ankara University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey

Undergraduate
1988 - 1992

Ankara University, Fen Fakültesi, Fizik Bölümü, Turkey

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Sıkıştırılmış spin durumları ve uygulamaları, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2000

Postgraduate, Katılarda perkolasyon mekanizmasının incelenmesi, Ankara University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 1995

Academic Titles / Tasks

Professor
2021 - Continues

Gazi University, Fen Bilimleri Enstitüsü, İLERİ TEKNOLOJİLER

Professor
2017 - 2021

Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektrik Ve Enerji Bölümü

Associate Professor
2014 - 2017

Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektrik Ve Enerji Bölümü

Associate Professor

2011 - 2013

Gazi University, Atatürk Meslek Yüksekokulu, Elektrik Ve Enerji

Expert

2000 - 2011

Diğer (Kurumlar,hastaneler Vb.), Kurumlar

Research Assistant

1993 - 2000

Ankara University, Fen Fakültesi, Fizik Bölümü

Supported Projects

1. GÖKMEN U., BİLGE OCAK S., Özkan Z., Project Supported by Higher Education Institutions, Farklı Oranlarda B4C ve TiO₂ İle Takviye Edilmiş AA6XXX Esaslı Fonksiyonel Derecelendirilmiş Hibrit Kompozitlerin Üretimi Ve Radyasyon Zırhlama Özelliklerinin İncelenmesi, 2022 - Continues
2. Bilge Ocak S., Gökmen U., Project Supported by Higher Education Institutions, Pestisit Kalıntı Analizi İçin Grafen Oksit Kullanarak Elektrokimyasal Sensör Tasarımı ve Analiz Metodunun Validasyonu, 2020 - 2022
3. Gökmen U., Bilge Ocak S., Çinici H., Akay D., Project Supported by Higher Education Institutions, AZ91 ve Al-Cu Esaslı Seramik Parçacık (B4C) Takviyeli Kompozit Malzeme Üretimi Ve Radyoaktif Zırhlama Özelliklerinin İncelenmesi, 2020 - 2022
4. Gökmen U., Bilge Ocak S., Project Supported by Higher Education Institutions, Komünikasyon Sistemlerinde kullanılmak üzere, Fotodedektör Üretimi ve Karakterizasyonu, 2019 - 2021
5. Bilge Ocak S., Gökmen U., Project Supported by Higher Education Institutions, Yarı İletken Radyasyon Dedektörü, 2017 - 2021
6. Bostan B., Gökmen U., Taşcı U., Bilge Ocak S., Project Supported by Higher Education Institutions, Inconel 718 Süperalaşım Tozunun Enjeksiyon Kalıplanması için Özgün Bağlayıcı Formülü Geliştirilmesi ve Akış Davranışının İncelenmesi, 2017 - 2019
7. Bilge Ocak S., Premiership, • Design and Production of Radiation Detection Devices (Hiprad), 2009 - 2015
8. BİLGE OCAK S., Project Supported by Higher Education Institutions, Organik /İnorganik yarıiletken malzemelerin hazırlanması ve karakterizasyonu, 2012 - 2014
9. BİLGE OCAK S., Project Supported by Higher Education Institutions, Oksit filmlerin optiksel ve elektriksel özelliklerinin araştırılması, 2012 - 2014
10. Bilge Ocak S., Premiership, • Hızlandırılmış Çevre ve Malzeme Bilimindeki Uygulamaları (Hızlandırılmış Elektronlar ile İçme ve Atık suların Işınlanması), 2001 - 2005
11. Bilge Ocak S., Premiership, • Hızlandırılmış Çevre ve Malzeme Bilimindeki Uygulamaları (Hızlandırılmış Elektron Demeti kullanarak Baca Gazlarından SO_x ve NO_x in uzaklaştırılması), 2001 - 2005
12. Bilge Ocak S., Tan E., Premiership, Technical Support for an Electron Beam Facility, 2000 - 2005
13. Bilge Ocak S., Altanhan T., TUBITAK Project, Yoğun madde fiziğinde sıkıştırılmış durumlar, 1997 - 1999

Scholarships

doktora bursu , TUBITAK, 1997 - 1999

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

1. Investigation of radiation shielding by adding Al₂O₃ and SiO₂ into the high-speed steel composites:

comparative study

Gökmen U., Özkan Z., Taşcı U., Bilge Ocak S.

PHYSICA SCRIPTA, vol.97, no.5, pp.1-16, 2022 (Journal Indexed in SCI Expanded)

2. **Impact of the gamma and neutron attenuation behaviors on the functionally graded composite materials**
Bilge Ocak S., Gökmen U., Özkan Z.
Physica Scripta, vol.96, no.125326, pp.1-15, 2021 (Journal Indexed in SCI Expanded)
3. **The impact of gamma-ray irradiation on temperature-sensitive electrical characteristics of Graphene/Al₂O₃/p-type Si structure**
Kaymak N., Orhan E., Bilge Ocak S.
PHYSICA SCRIPTA, vol.96, no.12, 2021 (Journal Indexed in SCI)
4. **Changes in frequency-dependent dielectric features of monolayer graphene/silicon structure due to gamma irradiation**
Seven E., ORHAN E., BİLGE OCAK S.
PHYSICA SCRIPTA, vol.96, no.12, 2021 (Journal Indexed in SCI)
5. **Gamma-ray irradiation effects on capacitance and conductance of graphene-based Schottky diode**
Kutluoglu E. E. , Orhan E., Bayram Ö., Bilge Ocak S.
PHYSICA B-CONDENSED MATTER, vol.621, 2021 (Journal Indexed in SCI)
6. **Dielectric characteristics and electrical conductivity behavior of graphene/Al₂O₃/p-type silicon structure**
Kaymak N., Orhan E., Bayram O., Bilge Ocak S.
Materials Chemistry and Physics, vol.258, 2021 (Journal Indexed in SCI)
7. **3D-graphene-laser patterned p-type silicon Schottky diode**
Orhan E., Efil E., Bayram O., Kaymak N., Berberoglu H., Candemir O., Pavlov I., Ocak S. B.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.121, 2021 (Journal Indexed in SCI)
8. **Current voltage analyses of Graphene-based structure onto Al₂O₃/p-Si using various methods**
Efil E., Kaymak N., Seven E., Orhan E., Bayram Ö., Bilge Ocak S., Tataroğlu A.
VACUUM, vol.181, 2020 (Journal Indexed in SCI)
9. **Investigation of the Effect of Hydrothermal Waters on Radionuclide Activity Concentrations in Natural Marble with Multivariate Statistical Analysis**
Yalçın F., Unal S., Yalçın M. G. , Aktürk Ö., Bilge Ocak S., Özmen S. F.
SYMMETRY-BASEL, vol.12, no.8, 2020 (Journal Indexed in SCI)
10. **Ionizing Radiation Influence on Rubrene-Based Metal Polymer Semiconductors: Direct Information of Intrinsic Electrical Properties**
Akay D., Gokmen U., Ocak S.
JOM, vol.72, no.6, pp.2391-2397, 2020 (Journal Indexed in SCI)
11. **Electrical properties of Graphene/Silicon structure with Al₂O₃ interlayer**
Kaymak N., Bayram Ö., Tataroğlu A., Bilge Ocak S., Orhan E.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.31, no.12, pp.9719-9725, 2020 (Journal Indexed in SCI)
12. **TUNING THE ELECTRICAL PROPERTIES WITH HIGHER GAMMA-RAY IRRADIATION: POLY (METHYL METHACRYLATE)/LEAD OXIDE (PbO) COMPOSITE NANOSTRUCTURES**
Akay D., Ocak S.
SURFACE REVIEW AND LETTERS, vol.27, no.6, 2020 (Journal Indexed in SCI)
13. **An evaluation of dielectric qualities by using frequency dependence in superbenzene-ring based organic polymer-semiconductors**
Akay D., Gokmen U., Ocak S.
MATERIALS CHEMISTRY AND PHYSICS, vol.245, 2020 (Journal Indexed in SCI)
14. **Effects of temperature and frequency on capacitance and conductance characteristics of zinc-oxide based MIS-Structure**
Kaymak N., Efil E., Seven E., Tataroğlu A., Bilge Ocak S., Orhan E.

PHYSICA B-CONDENSED MATTER, vol.576, 2020 (Journal Indexed in SCI)

15. **Radiation-induced changes on poly(methyl methacrylate) (PMMA)/lead oxide (PbO) composite nanostructure**
Akay D., Gökmen U., Ocak S.
PHYSICA SCRIPTA, vol.94, no.11, 2019 (Journal Indexed in SCI)
16. **Frequency dependent dielectric properties of atomic layer deposition grown zinc-oxide based MIS structure**
Efil E., Kaymak N., Seven E., Tataroglu A., Ocak S., Orhan E.
PHYSICA B-CONDENSED MATTER, vol.568, pp.31-35, 2019 (Journal Indexed in SCI)
17. **Electrical characteristics analyses of zinc-oxide based MIS structure grown by atomic layer deposition**
Kaymak N., Efil E., Seven E., Tataroğlu A., Bilge S., Orhan E.
MATERIALS RESEARCH EXPRESS, vol.6, no.2, 2019 (Journal Indexed in SCI)
18. **Study of frequency dependent characterization: applied gamma-ray irradiation on metal-polymer nanostructure**
Akay D., Efil E., Kaymak N., Orhan E., Ocak S.
JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.318, no.2, pp.1409-1417, 2018 (Journal Indexed in SCI)
19. **Effect of gamma-ray irradiation on the electrical characteristics of Al/C24H12/p-Si nano-structure**
Akay D., Karadeniz S., Selcuk A. B. , Bilge Ocak S.
PHYSICA SCRIPTA, vol.93, no.9, 2018 (Journal Indexed in SCI)
20. **Computation of gamma radioactivity of natural rocks in the vicinity of Antalya province and its effect on health**
Unal S., Yalcin M. R. , Ocak S., Yalcin R., Ozmen S. F.
KERNTECHNIK, vol.83, no.2, pp.112-120, 2018 (Journal Indexed in SCI)
21. **Investigation of dielectric properties of heterostructures based on ZnO structures**
Selcuk A. H. , Orhan E., Ocak S., Selcuk A. B. , Gökmen U.
MATERIALS SCIENCE-POLAND, vol.35, no.4, pp.885-892, 2017 (Journal Indexed in SCI)
22. **An analytical solution for the graphene electronic spectrum in the presence of external fields and confinement potential**
Cagatay B., Ocak S.
INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.30, no.11, 2016 (Journal Indexed in SCI)
23. **Frequency dependent dielectric properties of Al/maleic anhydride (MA)/p-Si structures**
Ocak S., Selcuk A. B. , Bayram S. B. , Ozbay A.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.17, pp.1747-1755, 2015 (Journal Indexed in SCI)
24. **Electrical analysis of Al/ZnO/p-Si, Al/PMMA/p-Si and Al/PMMA/ZnO/p-Si structures: Comparison study**
Ocak S., Selcuk A. B. , Aras G., Orhan E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.38, pp.249-256, 2015 (Journal Indexed in SCI)
25. **Frequency dependent dielectric properties of PMMA deposited on p-type silicon**
Selcuk A. B. , Ocak S., Aras G., ORHAN E.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.38, pp.119-125, 2015 (Journal Indexed in SCI)
26. **Investigation of diode parameters using I-V and C-V characteristics of Al/maleic anhydride (MA)/p-Si structure**
Selcuk A. B. , Ocak S., Kahraman G., Selcuk A. H.
BULLETIN OF MATERIALS SCIENCE, vol.37, no.7, pp.1717-1724, 2014 (Journal Indexed in SCI)
27. **Electrical Characteristics of Al/Poly(methyl methacrylate)/p-Si Schottky Device**
Selcuk A. B. , Ocak S., Aras F. G. , ORHAN E.
JOURNAL OF ELECTRONIC MATERIALS, vol.43, no.9, pp.3263-3269, 2014 (Journal Indexed in SCI)
28. **Electrical characteristics of a Schottky device based on maleic anhydride deposited on p-type silicon**

by spin coating technique

Ocak S., Selcuk A. B. , Kahraman G., Selcuk A. H.

JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.16, pp.956-963, 2014 (Journal Indexed in SCI)

29. **Characterization of electrical properties of Al/maleic anhydride (MA)/p-Si structures by well-known methods**
Ocak S., Selcuk A. B. , Kahraman G., Selcuk A. H.
SYNTHETIC METALS, vol.191, pp.83-88, 2014 (Journal Indexed in SCI)
30. **Multivariate Statistics and Heavy Metals Contamination in Beach Sediments from The Sakarya Canyon, Turkey**
Yalçın M. G. , Simsek G., Bilge Ocak S., Yalçın F., Kalayci Y., Karaman M. E.
ASIAN JOURNAL OF CHEMISTRY, vol.25, no.4, pp.2059-2066, 2013 (Journal Indexed in SCI)
31. **Effects of gamma irradiation on dielectric characteristics of SnO₂ thin films**
Selcuk A. B. , Ocak S., Yuksel O. F.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.594, no.3, pp.395-399, 2008 (Journal Indexed in SCI)
32. **Investigation of diode parameters using I-V and C-V characteristics of In/SiO₂/p-Si (MIS) Schottky diodes**
Yuksel O. F. , Selcuk A. B. , Ocak S.
PHYSICA B-CONDENSED MATTER, vol.403, no.17, pp.2690-2697, 2008 (Journal Indexed in SCI)
33. **Solutions of two-mode bosonic and transformed Hamiltonians**
Ocak S., Yesiltas Ö., Demircioglu B.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.47, no.7, pp.1865-1876, 2008 (Journal Indexed in SCI)
34. **High frequency characteristics of tin oxide thin films on Si**
Yuksel O. F. , Ocak S., Selcuk A. B.
VACUUM, vol.82, no.11, pp.1183-1186, 2008 (Journal Indexed in SCI)
35. **The generalized PT-symmetric Sinh-Gordon potential solvable within quantum Hamilton-Jacobi formalism**
YEŞİLTAŞ Ö., Ocak S.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.47, no.2, pp.415-420, 2008 (Journal Indexed in SCI)
36. **Analysis of frequency-dependent In/SiO₂/P-Si series resistance and interface states of (MIS) structures**
Selcuk A. B. , Tugluoglu N., Karadeniz S., Ocak S.
PHYSICA B-CONDENSED MATTER, vol.400, pp.149-154, 2007 (Journal Indexed in SCI)
37. **Effect of oxide thickness on the capacitance and conductance characteristics of MOS structures**
Tugluoglu N., Karadeniz S., Selcuk A. B. , Ocak S.
PHYSICA B-CONDENSED MATTER, vol.400, pp.168-174, 2007 (Journal Indexed in SCI)
38. **(CO)-C-60 gamma-ray irradiation effects on the capacitance and conductance characteristics of tin oxide films on Si**
Selcuk A. B. , Ocak S.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.577, no.3, pp.719-723, 2007 (Journal Indexed in SCI)
39. **On the interface trap density and series resistance of tin oxide film prepared on n-type Si(111) substrate: Frequency dependent effects before and after (CO)-C-60 gamma-ray irradiation**
Karadeniz S., Selcuk A. B. , Tugluoglu N., Ocak S.
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION B-BEAM INTERACTIONS WITH MATERIALS AND ATOMS, vol.259, no.2, pp.889-894, 2007 (Journal Indexed in SCI)
40. **Supersymmetric analysis of a spin Hamiltonian model**
Demircioglu B., Ocak S., Kuru S.
PHYSICS LETTERS A, vol.353, no.1, pp.34-39, 2006 (Journal Indexed in SCI)
41. **Two-mode bosonic squeezing and symmetry breaking**
Ocak S.

- PHYSICS LETTERS A, vol.335, pp.402-407, 2005 (Journal Indexed in SCI)
42. **The effective potential of squeezed spin states**
Ocak S., Altanhan T.
PHYSICS LETTERS A, vol.308, no.1, pp.17-22, 2003 (Journal Indexed in SCI)
43. **A squeezed-state approach for the spin polaron in the t-J model**
Bilge S., Altanhan T.
JOURNAL OF PHYSICS-CONDENSED MATTER, vol.12, no.8, pp.1837-1843, 2000 (Journal Indexed in SCI)
44. **Squeezed spin states and Heisenberg interaction**
Altanhan T., Bilge S.
JOURNAL OF PHYSICS A-MATHEMATICAL AND GENERAL, vol.32, no.1, pp.115-121, 1999 (Journal Indexed in SCI)

Articles Published in Other Journals

1. **The Effect of Ionizing Radiation on Device Parameters In Organic Based Schottky Diodes Used in Solar Cell Applications**
Karadaniz S., Barış B., Karadeniz H., Bilge Ocak S., Selçuk A.
Karadeniz, vol.11, no.1, pp.222-238, 2021 (National Refreed University Journal)
2. **Investigation of radiation attenuation properties of Al-Cu matrix composites reinforced by different amount of B4 C particles**
Bilge Ocak S., Gökmen U.
Bor Dergisi, vol.5, no.3, pp.124-130, 2020 (Other Refereed National Journals)
3. **An Analyses of Schottky Structure with Lead Monoxide Layer**
Bilge Ocak S., Gökmen U.
Composite Materials Research, vol.1, no.2, 2019 (Journal Indexed in ESCI)
4. **An investigation of the electrical properties of PbO based MOS-type different Schottky barrier diodes on a structure**
Bilge Ocak S., Orhan E.
AIP Conference Proceedings, vol.1935, no.1, pp.160002-160008, 2018 (Journal Indexed in ESCI)
5. **Investigation of low-frequency dependent characteristics of Al/Maleic Anhydride (MA)/p-Si Schottky barrier diode**
Orhan E., Bilge Ocak S., Selçuk A. B.
AIP Conference Proceedings, vol.1935, no.1, pp.1-5, 2018 (Journal Indexed in ESCI)
6. **Dielectric Properties of Al Poly methyl methacrylate PMMA p Si Structures at Temperatures Below 300 K**
Orhan E., Bilge Ocak S.
Procedia - Social and Behavioral Sciences, vol.195, pp.1740-1745, 2015 (Journal Indexed in ESCI)
7. **Experimental Study of Effects of Ultrasonic Waves on Heat Distribution in Gaseous Medium**
Köprü M., Orhan E., Bilge Ocak S.
Procedia - Social and Behavioral Sciences, vol.195, pp.2849-2858, 2015 (Journal Indexed in ESCI)
8. **Influence of alpha particle irradiation on oxide layer schottky of structures**
Bilge Ocak S., Selçuk A.
IOSR (IOSR-JAGG), vol.1, pp.10-13, 2013 (Journal Indexed in ESCI)
9. **Gaussian Distribution on Electrical characteristics of Al SiO₂ p Si Structures**
Bilge Ocak S., Karadeniz S.
American Journal of Materials Science, vol.2, pp.125-130, 2012 (Journal Indexed in ESCI)
10. **Hızlandırılmış Elektron Demeti ile Atık Suların Işınlanması Tekniğinin Değerlendirilmesi**
Bilge Ocak S.
TMMOB Fizik Mühendisleri Odası, vol.2, pp.30-38, 2002 (Other Refereed National Journals)
11. **Çok Amaçlı Kullanım için Elektronik Hızlandırıcı Ünitesi Tasarımı**
Bilge Ocak S.

- TMMOB Fizik Mühendisleri Odası Bülteni, vol.1, pp.10-20, 2002 (Other Refereed National Journals)
12. **Hızlandırılmış Elektron Demeti ile Baca Gazlarından SO₂ ve NO_x'in Uzaklaştırılması İşleminin Teknik ve Ekonomik Açından Değerlendirilmesi**
Bilge Ocak S.
TMMOB Fizik Mühendisleri Odası Bülteni, vol.2, pp.1-10, 2001 (Other Refereed National Journals)
13. **Evaluation of the electron beam flue gas treatment process to remove SO₂ and NO_x emission from coal thermal power plants in Turkey**
Bilge Ocak S.
IAEA-SM-, vol.366, no.155, pp.120-122, 2001 (Journal Indexed in ESCI)

Books & Book Chapters

- 1. Comparison Of Electronic Properties Of Poly (Methyl Methacrylate) With The Double Heterostructure (Pmma/ Lead Oxides)**
Akay D., Gökmen U., Bilge Ocak S.
in: Engineering On Energy Materials, Akay Defne, Editor, Iksad Publications, Ankara, pp.3-28, 2020
- 2. SICAK PRESLEME YÖNTEMİ İLE ÜRETİLMİŞ B₄C PARÇACIK TAKVİYELİ MAGNEZYUM MATRİSLİK KOMPOZİT MALZEMENİN RADYOAKTİF ÖZELLİKLERİNİN TEORİK OLARAK İNCELENMESİ**
Gökmen U., Yılmaz Ö., Bilge Ocak S.
in: MÜHENDİSLİK ALANINDA TEKNOLOJİK GELİŞMELER, PROF. DR. HÜLYA KALAYCIOĞLU DR. ÖĞR. ÜYESİ SENAI YALÇINKAYA, Editor, GÜVEN PLUS GRUP DANIŞMANLIK A.Ş. YAYINLARI, İstanbul, pp.287-309, 2020
- 3. A comparison the electrical properties of PbO and PMMA/PbO deposited on p-type silicon**
Gökmen U., Orhan E., Bilge Ocak S.
in: ISMS Book, Prof. Dr. Serdar SALMAN ve Prof. Dr. Zafer GÖLEN, Editor, Gece Kitaplığı, Ankara, pp.95-101, 2018
- 4. Gamma-ray irradiation investigation on the electrical properties of PMMA/ZnO deposited on p-type silicon**
Gökmen U., Orhan E., Bilge Ocak S., Seven E.
in: ISMS Book, Prof. Dr. Serdar SALMAN ve Prof. Dr. Zafer GÖLEN, Editor, Gece Kitaplığı, Ankara, pp.385-391, 2018

Refereed Congress / Symposium Publications in Proceedings

- 1. Gamma and Neutron Attenuation Behaviors of Composite Materials**
Bilge Ocak S.
The Scientific Program of the 9th International Engineering, Architecture and Design Congress, İstanbul, Turkey, 30 April 2022, pp.5-7
- 2. T15 YÜKSEK HIZ ÇELİĞİNİN RADYASYON ZAYIFLATMA ÖZELLİKLERİNİN ARAŞTIRILMASI**
Gökmen U., Bilge Ocak S., Özkan Z.
III. Uluslararası Savunma Sanayi Sempozyumu, Kırıkkale, Turkey, 7 - 09 October 2021, pp.1-4
- 3. Graphen oxide/Gold Nanoparticle Based Electro chemical Sensor Design For Pesticide Residue Analysis**
Bilge Ocak S., Aslan N.
Turkish Physical Society 33. International Congress, Muğla, Turkey, 7 - 10 September 2020, pp.450-451
- 4. Analyses Of Diode Parameters Using C-V and G-V Characteristics Of Al/PMMA/PbO/P-Si Structures**
BİLGE OCAK S., AKAY D., GÖKMEN U.
türk fizik derneği 35. uluslararası fizik kongresi, 5 June - 09 September 2019
- 5. Characterization Of Electrical Properties Of PMMA/PbO Structures**
BİLGE OCAK S., AKAY D., GÖKMEN U.
türk fizik derneği 35. uluslararası fizik kongresi, 5 - 09 September 2019
- 6. Electrical Characteristics of Al/Graphene/Laser Patterned P Type Si Schottky Diode**

Orhan E., Bilge Ocak S.

IATENS'19, Konya, Turkey, 4 - 06 October 2019, pp.6-7

7. **Capacitance-Voltage and Conductance-Voltage Characteristics of Schottky Diode Based Graphene Nanosheet**
Efil E., Bayram Ö., Orhan E., Bilge Ocak S.
IATENS'19, Konya, Turkey, 4 - 06 October 2019
8. **Current-Voltage Characteristics of Graphene Nanosheet Schottky Diode**
Efil E., Bayram Ö., Orhan E., Bilge Ocak S.
IATENS'19, Konya, Turkey, 4 - 06 October 2019, pp.20-21
9. **PECVD Grown Graphen Nanosheets onto Laser Patterned P Type Si**
Kaymak N., Bayram Ö., Bilge Ocak S., Orhan E.
IATENS'19, Konya, Turkey, 4 - 06 October 2019, pp.8-9
10. **GAMMA-RAY IRRADIATION IMPACTS ON THE CURRENTVOLTAGERELATIONS OF RUBRENE BASED ORGANIC METALPOLYMER SEMICONDUCTORS**
BİLGE OCAK S., AKAY D., GÖKMEN U.
7. EUROPEAN CONFERENCEONRENEWABLE ENERGY SYSTEMS, 10 - 12 June 2019
11. **ELECTRONIC AND CONDUCTIVITY CHARACTERISTICS OFRUBRENE PENTAGON BASED SCHOTTKY BARRIER DIODES(SBDs): 蓄積型 GAMMA-RAY IRRADIATION**
Bilge Ocak S., Akay D., Gökmen U.
7. EUROPEAN CONFERENCEONRENEWABLE ENERGY SYSTEMS, Madrid, Spain, 10 - 12 June 2019, pp.519-522
12. **Dijital Baskıda Kağıt Yüzey Yapısının Görüntü Kalitesine Etkisinin İncelenmesi**
ERBAŞ B., ÖZCAN A., GÖKMEN U., BİLGE OCAK S.
3rd International Symposium on Innovative Approaches in Scientific Studies, Ankara, Turkey, 19 - 21 April 2019, vol.1, pp.264-275
13. **A comparison the electrical properties of PbO and PMMA/PbO deposited on p-type silicon**
EFİL E., KAYMAK N., GÖKMEN U., ORHAN E., BİLGE OCAK S., SELÇUK A. B.
International Symposium on Multidiciplinary Studies (ISMS2018), 16 - 17 November 2018
14. **Gamma-ray irradiation investigation on the electrical properties of PMMA/ZnO deposited on p-type silicon**
KAYMAK N., EFİL E., GÖKMEN U., ORHAN E., BİLGE OCAK S., SEVEN E.
International Symposium on Multidiciplinary Studies (ISMS 2018), 16 - 17 November 2018
15. **Investigation of gamma-ray irradiation effects on dielectric properties of rubrene deposited on p-type silicon**
KAYMAK N., EFİL E., SEVEN E., SELÇUK A. B., ORHAN E., BİLGE OCAK S.
Materials Science and Advanced Nanotechnologies for Next Generation (MSNG2018), 4 - 06 October 2018, pp.193-195
16. **Frequency dependent effects before and after gamma-ray irradiation on Al/C42H28/p-Si structure**
KAYMAK N., EFİL E., AKAY D., ORHAN E., BİLGE OCAK S., seven e.
Materials Science and Advanced Nanotechnologies for Next Generation (MSNG2018), 16 - 17 October 2018, pp.199-201
17. **A study of gamma-ray irradiation effect on electrical of characteristic of the metal-polymer-semiconductor structure**
EFİL E., SELÇUK A. B., KAYMAK N., BİLGE OCAK S., ORHAN E., elenur s.
Materials Science and Advanced Nanotechnologies for Next Generation (MSNG2018), 16 - 17 October 2018, pp.196-198
18. **İNCONEL 718 SÜPERALAŞIM TOZLARININ AKIŞ DAVRANIŞÖZELLİKLERİNİN İNCELENMESİ**
GÖKMEN U., BİLGE OCAK S.
8th International Conference of Strategic Research on Scientific Studies and Education 2018, Viyana, Austria, 11 - 13 May 2018, vol.1, pp.89-95
19. **FREQUENCY DEPENDENT EFFECTS BEFORE AND AFTER GAMMARAY IRRADIATION ON AL/C24 H12 /P-SI MPS STRUCTURE**

- Bilge Ocak S., Orhan E.
6. EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS, İstanbul, Turkey, 25 - 27 June 2018, pp.29-31
20. **FREQUENCY DEPENDENT DIELECTRIC PROPERTIES OF ATOMIC LAYER DEPOSITION GROWN ZINC-OXIDE BASED MIS STRUCTURE**
Bilge Ocak S., Orhan E.
6. EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS , İstanbul, Turkey, 25 - 27 June 2018, pp.35-37
21. **EFFECTS OF TEMPERATURE AND FREQUENCY ON CAPACITANCE AND CONDUCTANCE CHARACTERISTICS OF ZINC-OXIDE BASED MIS-STRUCTURE**
Bilge Ocak S., Orhan E.
6. EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS, İstanbul, Turkey, 25 - 27 June 2018, pp.32-34
22. **FREQUENCY DEPENDENT DIELECTRIC CHARACTERISTICS AND ELECTRICAL CONDUCTIVITY BEHAVIOR OF AL/C24 H12/P-SI STRUCTURE**
Bilge Ocak S., Orhan E.
6. EUROPEAN CONFERENCE ON RENEWABLE ENERGY SYSTEMS , İstanbul, Turkey, 25 - 27 June 2018, pp.31-35
23. **DOSE RATES AND ACTIVITY CONCENTRATIONS OF NATURAL ROCKS**
BİLGE OCAK S., UNAL S., YALÇIN M. G. , ÖZER Ö.
9th International Symposium of the Eastern Mediterranean Geology (ISEMG 2018), Antalya, Turkey, 7 - 11 May 2018
24. **Investigation of Low-Frequency Dependent Characteristics of Al/Maleic Anhydride (MA)/p-Si Schottky Barrier Diode**
Kaymak N., Oz Orhan E., Ocak S., Selcuk A. B.
33rd International Physics Congress of the Turkish-Physical-Society (TPS), Bodrum, Turkey, 6 - 10 September 2017, vol.1935
25. **DESIGN OF CONTROL AND DATA ACQUISITION SOFTWARE FOR A MULTISTRIP DETECTOR SYSTEM**
Selçuk A. B. , Bilge Ocak S., Selçuk A. H.
Turkish Physical Society 33. International Congress, Muğla, Turkey, 6 - 09 September 2017, pp.95-96
26. **Desing and Fabrication of Green Laser Designater Prototype**
DEVELİ B., TİKEN M., BERBEROĞLU H., BİLGE OCAK S., ORHAN E.
Turkish Physical Society 33. International Congress, 6 - 10 September 2017
27. **Design of a new radiation chamber for multistripped detector system**
SELÇUK A. B. , SELÇUK A. H. , BİLGE OCAK S.
Turkish Physical Society 33. International Congress, 6 - 10 September 2017
28. **Investigation of Low Frequency- Dependent Characteristics of PBOThin Films**
SELÇUK A. B. , EFİL E., ORHAN E., BİLGE OCAK S.
Turkish Physical Society 33. International Congress., 6 - 10 September 2017
29. **Low Frequency Dependent Dielectric Properties of Al/MA/P-Si Structures**
KAYMAK N., SELÇUK A. B. , ORHAN E., BİLGE OCAK S.
Turkish Physical Society 33. International Congress, 6 - 10 September 2017
30. **ANALYSIS OF DIODE PARAMETERS USING HIGH FREQUENCY-DEPENDENT CHARACTERISTICS OF AL/PBO/P-STRUCTURES**
SELÇUK A. B. , GÖKMEN U., ORHAN E., BİLGE OCAK S.
TURKISH PHYSICAL SOCIETY 33 . INTERNATIONAL PHYSICS CONGRESS, 6 - 10 September 2017
31. **High-Frequency Characteristics of MOS structures**
EFİL E., ORHAN E., SELÇUK A. B. , BİLGE OCAK S.
Turkish Physical Society 33. International Congress., 6 - 10 September 2017
32. **Analysis of Low Frequency-Dependent Series Resistance and Interface States of Al/ZnO/P-Structures**
ORHAN E., TAŞCI U., SELÇUK A. B. , BİLGE OCAK S.
Turkish Physical Society 33. International Congress., 6 - 10 September 2017
33. **Characterization of Electrical Properties of Al/ZnO/P-Si Structures**
BİLGE OCAK S., SELÇUK A. B. , ORHAN E., SELÇUK A. H.

- Turkish Physical Society 33. International Congress, 6 - 10 September 2017
34. **High Frequency Characteristics of Organic Thin Films on Si**
TAŞCI U., SELÇUK A. B. , ORHAN E., BİLGE OCAK S.
Turkish Physical Society 33. International Congress., 6 - 10 September 2017
35. **Electrical Analysis of Al/PbO/P-Si Structures**
SELÇUK A. B. , ORHAN E., KAYMAK N., BİLGE OCAK S.
Turkish Physical Society 33. International Congress, 6 - 10 September 2017
36. **Investigation of Electrical Characteristics of Al/Maleic Anhydride/P-Si by Using Different Methods**
GÖKMEN U., SELÇUK A. B. , ORHAN E., BİLGE OCAK S.
Turkish Physical Society 33. International Congress., 6 - 10 September 2017
37. **Solution of transverse electric Added haronic oscillator and perpendicular magnetic fields to a graphene layer**
cagatay b., BİLGE OCAK S.
Turkish Physical Society 33. International Congress, 6 - 10 September 2017
38. **Dielectric Properties of Hetero-Structures Based on ZnO**
BİLGE OCAK S., ORHAN E., SELÇUK A. B.
Turkish Physical Society 33. International Congress, 6 - 10 September 2017
39. **Gamma-Ray Irradiation Effects on Electric Characteristic of Al/C24H12/p-Si Structures**
AKAY D., SELÇUK A. B. , KARADENİZ S., BİLGE OCAK S.
International Congress on Semiconductor Materials and Devices (ICSMD-2017), 15 - 17 August 2017
40. **Investigation of Frequency Dependent Effects Before And After Gamma-RayIrradiation on Al/C24 H12 /P-Si Structures**
AKAY D., SELÇUK A. B. , KARADENİZ S., BİLGE OCAK S.
INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES, 17 - 19 August 2017
41. **Gamma-Ray Irradiation Effects on Electric Characteristics of Al/C24 H12 /P SiStructures**
AKAY D., SELÇUK A. B. , KARADENİZ S., BİLGE OCAK S.
INTERNATIONAL CONGRESS ON SEMICONDUCTOR MATERIALS AND DEVICES, 17 - 19 August 2017
42. **Determination of Average Fluorescence Yields of N Shell for Elements 38 101**
Büyükyıldız M., Yavuz İ., Bilge Ocak S., Orhan E.
Turkish Physical Society 32 nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016, pp.13-15
43. **Frequency Dependent Dielectric Propertes of Heterogeneous Structure**
ORHAN E., BİLGE OCAK S., TATAROĞLU A.
Turkish Physical Society 32 nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016
44. **Determination of average fluorescence yields of Nshell for elements 38 Z 101**
BÜYÜKYILDIZ M., BİLGE OCAK S., ORHAN E.
Turkish physical society 32. international physics Congress, 6 - 09 September 2016
45. **effect of pbo nanolayer on electrical characteristics of AL PBO P Sİ schottky device**
BİLGE OCAK S., ORHAN E., selcuk A. b.
Turkish physical society 32. international physics Congress, 6 - 09 September 2016
46. **Frequency Dependent Dielectric Properties of Al PBO p Si Schottky Device**
Bilge Ocak S., Orhan E.
Turkish Physical Society 32 nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016
47. **Effect of PBO Nanolayer on Electrical Characteritics of Al PBO P Si Schottky Device**
Bilge Ocak S., Orhan E.
Turkish Physical Society 32 nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016, pp.80-81
48. **Frequency dependent dielectric properties of AL PBO P Sİ schottky device**
Bilge Ocak S., Orhan E.
Turkish physical society 32. international physics Congress, Muğla, Turkey, 6 - 09 September 2016
49. **Frequency Dependent Dielectric Properties of Heterogeneous Structures**
ORHAN E., BİLGE OCAK S., TATAROĞLU A.
Turkish Physical Society 32nd International Physics Congress, 6 - 09 September 2016

50. **Electrical and Dielectric Characteristics of Maleic Anhydride Deposited on P Type Silicon**
kalmaz o., ORHAN E., BİLGE OCAK S.
IPCAP 2016, 25 - 27 February 2016
51. **Dielectric Properties of Al Poly methyl methacrylate PMMA p Si Structures at Temperatures Below 300 K**
Aras G., Orhan E., Bilge Ocak S., Ertuğrul M.
ISTANBUL UNIVERSITYWORLD CONFERENCEON TECHNOLOGY, INNOVATION AND ENTREPRENEURSHIP“ENTREPRENEURSHIP FOR TECHNOLOGYAND INNOVATION - BASED SUSTAINABLE DEVELOPMENT, İstanbul, Turkey, 28 - 30 May 2015, pp.15-30
52. **Experimental Study of Effects of Ultrasonic Waves on Heat Distribution in Gaseous Medium**
Köprü M., Orhan E., Bilge Ocak S.
ISTANBUL UNIVERSITYWORLD CONFERENCEON TECHNOLOGY, INNOVATION AND ENTREPRENEURSHIP“ENTREPRENEURSHIP FOR TECHNOLOGYAND INNOVATION - BASED SUSTAINABLE DEVELOPMENT, İstanbul, Turkey, 28 - 30 May 2015, pp.375-380
53. **Radyasyon Ölçüm Teknikleri**
Bilge Ocak S.
2.Tıbbi Jeoloji Çalıştayı, Antalya, Turkey, 4 - 06 December 2013, pp.271-272
54. **Radon Gazının Etkileri**
Bilge Ocak S.
2.Tıbbi Jeoloji Çalıştayı,, Antalya, Turkey, 4 - 06 December 2013, pp.273-275
55. **Electrical properties of Al/PMMA/ZnO diodes**
Bilge Ocak S., Orhan E.
0. nanoscience and nanotechnology conferance, Erzurum, Turkey, 24 - 28 June 2013, pp.15-18
56. **ELEKTRON HIZLANDIRICILARININ DEPOLANAN TAHILLARDAKİ BÖCEKLENMENİN ÖNLENMESİNE YÖNELİK KULLANIMI**
Bilge Ocak S.
III. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, Kayseri, Turkey, 15 - 17 October 2003, pp.1-8
57. **Study of Plasma-based dtack Gases cleaning Technolgy to remove SOxand NOX emission from Coal – Fired Power Plants in Turkey**
Bilge Ocak S.
Nuclear science and its application, Almati, Kazakhstan, 16 - 19 September 2002, pp.255-260
58. **Treatment of air pollution from thermal power plants in Turkey by using electron beam**
Bilge Ocak S.
Nuclear Analytical Methods in the life sciences, Antalya, Turkey, 16 - 21 June 2002, pp.28-35
59. **Elektron Hızlandırıcılarının Gıda Işınlaması için Değerlendirilmesi**
Bilge Ocak S.
Ankara Üniversitesi Ziraat Fakültesi Gıda Mühendisliği Bölümü Gıda Teknolojisi Derneği Türkiye 7.Gıda Kongresi , Ankara, Turkey, 22 - 24 May 2002, pp.2-10

Academic and Administrative Experience

| | | |
|-------------|---------------------------|--|
| 2016 - 2019 | Head of Department | Gazi University, Teknik Bilimler Meslek Yüksekokulu, Elektrik ve Enerji Bölümü |
|-------------|---------------------------|--|

Courses

İLERİ NÖTRON VE REAKRÖE FİZİĞİ, Postgraduate, 2015 - 2016, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021 - 2022
DOZİMETRİ ÖLÇÜM TEKNİKLERİ, Postgraduate, 2016 - 2017, 2017 - 2018, 2018 - 2019, 2019 - 2020, 2020 - 2021, 2021

- 2022

MEDİKAL GÖRÜNTÜLEME VE TEKNİKLERİ, Postgraduate, 2012 - 2013, 2015 - 2016, 2019 - 2020, 2020 - 2021, 2021 - 2022

radyasyon algılama sistemleri, Doctorate, 2019 - 2020, 2020 - 2021

Advising Theses

BİLGE OCAK S., Epitaxially Growth Of Gan-Pin Sensor And Characterizations, Postgraduate, Ö.AHMET(Student), 2019

BİLGE OCAK S., Investigation Of Gamma Radiation Effect On Pmma/Pbo Structure, Postgraduate, G.GÜNEŞ(Student), 2019

Bilge Ocak S., Investigation Of Electrical Properties Of Al/Ma/P-Si Structures With Different Methods, Postgraduate, A.Özbay(Student), 2019

BİLGE OCAK S., Investigation Of Pilating And Waferability Of Papers Printed In Electrophotographic Printing System, Postgraduate, B.ERBAŞ(Student), 2019

BİLGE OCAK S., Al/MA/p-Si yapıların elektriksel özelliklerinin farklı metodlarla incelenmesi, Postgraduate, A.ÖZBAY(Student), 2019

Bilge Ocak S., Investigation of electricity properties of metal oxidesemiconductor doped lead oxide, Postgraduate, İ.Cıbrı(Student), 2017

BİLGE OCAK S., Interface Characterization Of Mıs Structures, Postgraduate, R.OKUR(Student), 2016

Activities in Scientific Journals

Gazi University Journal of Science Part A: Engineering and Innovation, First Editor, 2020 - Continues

Scientific Refereeing

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, March 2022

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, March 2022

APPLIED PHYSICS LETTERS, SCI Journal, November 2021

International Journal Of Modern Physics B, SCI Journal, July 2021

Physica Scripta, SCI Journal, March 2021

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, December 2020

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, October 2020

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, October 2020

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, August 2020

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, August 2020

KARADENİZ FEN BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, June 2020

APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, SCI Journal, December 2018

CUMHURİYET ÜNİVERSİTESİ FEN-EDEBİYAT FAKÜLTESİ FEN BİLİMLERİ DERGİSİ, National Scientific Refreed Journal, January 2016

Measurement & Control, SCI Journal, May 2015

Citations

Total Citations (WOS):312

h-index (WOS):10

Research Areas

Physics, Interdisciplinary Physics and Related Science and Technology Areas, Nuclear physics, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties

Non Academic Experience

Other Public Institution, Türkiye Atom Enerjisi Kurumu, AR-GE Bölümü