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International Researcher IDs

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Education Information

Doctorate, Odtü, Fen Edebiyat, Fizik, Turkey Continues

Odtü, Fen Edebiyat, Fizik, Turkey Continues

Undergraduate, Middle East Technical University, Fen Edebiyat, Fizik, Turkey Continues

Research Areas

Physics, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Natural Sciences

Academic Titles / Tasks

Professor, Yildiz Technical University, Faculty Of Arts & Science, Department Of Physics, 2014 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Indium and hafnium chloride modified titanium oxide thin films**
AYARCI KURUOĞLU N., CHOI F. P., ÖZDEMİR O.
Optik, vol.283, 2023 (SCI-Expanded)
- II. **Determination of band tail widths in MOCVD grown InGaN single layer within GaN based p-i-n LED structure through photo-induced measurements**
Özdemir O., Bozkurt K., Ayarçı Kuruoğlu N., Baş H., Sarcan F., Erol A., Alshehri B., Dogheche K., Dogheche E.
JOURNAL OF LUMINESCENCE, vol.255, pp.119543, 2023 (SCI-Expanded)
- III. **Investigation of luminescence centers inside InGaN/GaN multiple quantum well over a wide range of temperature and injection currents**
Ayarçı Kuruoğlu N., Özdemir O., Bozkurt K., Baş H., Alshehri B., Dogheche K., Dogheche E.
JOURNAL OF MATERIALS SCIENCE: MATERIALS IN ELECTRONICS, vol.00, no.00, 2022 (SCI-Expanded)
- IV. **Development and characterization of sodium alginate/bifidobacterium probiotic biohybrid material used in tissue engineering**
Denktas C., Baysoy D. Y., Bozdoğan A., Bozkurt H. S., Bozkurt K., Özdemir O., Yılmaz M.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.139, no.18, 2022 (SCI-Expanded)

V. Biodegradation of microplastic by probiotic bifidobacterium

Bozkurt H. S., Civelek Yörüklü H., Bozkurt K., Denktas C., Bozdoğan A., Özdemir O., Özkaya B.
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.26, no.4, pp.429-443, 2022 (SCI-Expanded)

Articles Published in Other Journals

I. Admittance Analysis in (PPE-PPV) Polymer (AnE-PVstat) Light Emitting Diodes

Kavak P., Özdemir O., Pıravadılı Mucur S., Tekin E., Menda D., Kutlu K., Boudiba S., Egbe D., Ulbricht C.
SPIE Conference Proceedings, vol.8829, pp.882921-882924, 2013 (Conference Book)

Books

I. Influence of Heat Treatment on Structure and Charge Capacity of Sol-Gel Produced TiO₂ Films

Özdemir O., Gökdemir F. P., Keskin B., Kutlu K.
in: International Congress on Energy Efficiency and Energy Related Materials ENEFM2013,
Oral,A.Y.,Bahsi,Z.B.,Ozer,M., Editor, Springer, Zürich, pp.307-313, 2013

Papers Published in Refereed Scientific Meetings

I. Betavoltaic Study on GaN p-i-n Diode

Özdemir O., BOZKURT K., Ramdane A., Belahsene S., Martinez A.
XXI International School on Nuclear Physics, Neutron Physics and Applications, 01 September 2015

II. Determination of Band Offset of Sol-Gel Synthesized TiO₂ Over Silicon Substrates By IPE Measurement

Can N., Saatci A., Gökdemir P., Özdemir O., Kutlu K.
Turkish Physical Society 31st International Physics Congress (TFD31) 21-24 July, Muğla, Turkey, 21 - 24 July 2014,
pp.374

III. Investigation of Sol-Gel Deposited Vanadium Oxide By Capacitance/Voltage Measurement As SIS Structure

SAATCI A. E., GÖKDEMİR F. P., ÖZDEMİR O., KUTLU K.
4th International Advances in Applied Physics and Materials Science Congress & Exhibition, Muğla Fethiye,
Turkey, 24 - 27 April 2014

IV. Dielectric Strength of WO₃ Thin Films By Admittance and Ellipsometry Measurements

ÖZDEMİR O., GÖKDEMİR F. P., SAATCI A. E., KUTLU K.
4th International Advances in Applied Physics and Materials Science Congress & Exhibition, Muğla Fethiye,
Turkey, 24 - 27 April 2014

V. Electrical characterization of sol-gel derived TiO₂ Films on N/P c-Si substrates by admittance measurement

SAATCI A. E., GÖKDEMİR F. P., ÖZDEMİR O., KUTLU K.
AMWC 2013: Advanced Materials World Congress, İzmir Çeşme, Turkey, 16 - 19 September 2013

VI. Simulation Study of Charge Transport in PCDTBT: PCBM Organic Solar Cell

ÖZDEMİR O., SAATCI A. E., AYDOĞAN P., GÖKDEMİR F. P., MENDA U. D., KUTLU K.
3rd International Advances in Applied Physics & Materials Science Congress, Antalya, Turkey, 24 - 28 April
2013

VII. Carrier Transport Property of Organic Light Emitting Diode (OLED) Through Admittance Spectroscopy

KAVAK P., TEKİN E., SAATCI A. E., GÖKDEMİR F. P., MENDA U. D., CAN N., ÖZDEMİR O., KUTLU K.
3rd International Advances in Applied Physics & Materials Science Congress, Antalya, Turkey, 24 - 28 April

2013

- VIII. **Influence of V5 and V4 Oxidation States on Electrochromic and IR Properties of Sol-Gel Deposited V2O5 Films**
GÖKDEMİR F. P., ÖZDEMİR O., KUTLU K.
EMRS Fall Meeting 2011, Varşova, Poland, 19 - 23 September 2011
- IX. **The influence of Er doping on the optical properties of CeO2 thin films grown by PED**
GÖKDEMİR F. P., ÖZDEMİR O., KUTLU K., TATAR B.
26th International Physics Congress of Turkish Physical Association, Muğla-Bodrum, Turkey, 24 September 2009
- X. **Temperature Dependence of PECVD Grown Boron Nitride Film in MIS structure**
ÖZDEMİR O., BOZKURT B., YILMAZER U. D., GÖKDEMİR F. P., KUTLU K.
7th International Conference of the Balkan-Physical-Union, Alexandroupoli, Greece, 9 - 13 September 2009
- XI. **Frequency dispersion originated from disordered layer within plasma grown boron nitride thin film**
ÖZDEMİR O., YILMAZER U. D., GÖKDEMİR F. P.
Diamond 2009: 20th European Conference on Diamond, Diamond-like Materials, Carbon Nanotubes, and Nitrides, Atina, Greece, 6 - 10 September 2009
- XII. **Observation of Apparent MOS regimes on Al/PECVD Grown Boron Nitride/p-c-Si/Al MIS structure, investigated through admittance spectroscopy**
ÖZDEMİR O., GÖKDEMİR F. P., MENDA U. D., KUTLU K.
Diamond 2008: 19th European Conference on Diamond, Diamond-like Materials, Carbon Nanotubes, and Nitrides, Sitges, Spain, 7 - 11 September 2008

Supported Projects

ÖZDEMİR O., TUBITAK Project, Silisyum tabanlı ışık yayımlayan yapıların üretilmesi, Continues

ÖZDEMİR O., TUBITAK Project, Silisyum nitrür filmlerin plazmayla büyütülmesi, amorf silisyum ince tabanlı ince film transistörlere uygulanması, Continues

ÖZDEMİR O., Other International Funding Programs, a-SiCx:H ince filmlerin üretilmesi ve ışıyan PIN yapıya ayarlanması, Continues

ÖZDEMİR O., Other International Funding Programs, YTU Merkez Lab Kurulumu, Continues

AYARCI KURUOĞLU N., baş h., ÖZDEMİR O., BOZKURT K., Project Supported by Higher Education Institutions, Tek tabaka ve çoklu kuantum kuyudan oluşan 10 In katkılı InxGa1xNGaN LED yapıların elektronik optoelektronik özelliklerinin karşılaştırılması, 2021 - 2023

BOZKURT K., SANCAR BOZKURT H., ÖZDEMİR O., Project Supported by Higher Education Institutions, Bifidobakterilerde Elektro-Optik, Algılama ve Diğer Fiziksel Aktivitelerinin İncelenmesi ve Uygulama Alanları, 2021 - 2023

YAĞCI Ö., ÖZDEMİR O. K., ÖZDEMİR O., BOZKURT K., Project Supported by Higher Education Institutions, Borik Asit Katkılanmış Cu3SbS3 Tabakasının Silikon Tabanlı Fotovoltaik Hücrelerde Kullanılması, 2021 - 2023

ÖZDEMİR O., BAŞ H., Project Supported by Higher Education Institutions, Metal Organik Kimyasal Buhar Biriktirme Sistemi Tekniğiyle Büyütülen Galyum Nitrit Filmlerin pin Yapısındaki Işık Yayan Diyotların Özelliklerinin İncelenmesi, 2019 - 2021

AYARCI KURUOĞLU N., ÖZDEMİR O., BOZKURT K., Project Supported by Higher Education Institutions, %30 In katkılı InxGa1xN/GaN çoklu kuantum kuyuların optoelektronik özelliklerinin incelenmesi, 2018 - 2019

ÖZDEMİR O., CHOI F. P., Project Supported by Higher Education Institutions, a-Si:H/c-Si Eklemin HIT Türü Güneş Piliindeki Rolü, 2012 - 2015

ÖZDEMİR O., Project Supported by Higher Education Institutions, PECVD Yöntemiyle a-Si:H Tabanlı HIT Güneş Pili Üretimi ve Karakterizasyonu, 2012 - 2015

ÖZDEMİR O., CHOI F. P., Project Supported by Higher Education Institutions, Erbiyum Katkılı/Katkısız İnce Filmlerin Elektrokromik Özelliklerinin İncelenmesi, 2012 - 2015

ÖZDEMİR O., CHOI F. P., Project Supported by Higher Education Institutions, Yüksek Dielektrik Sabitli Alternatif Yalıtkan Filmlerin Metal/Yalıtkan/Yarıiletken (MIS) yapısında incelenmesi, 2011 - 2015

ÖZDEMİR O., CHOI F. P., Project Supported by Higher Education Institutions, PECVD yöntemiyle büyütülmüş bor nitrür

filmlerin elektriksel ve optiksel özelliklerinin incelenmesi ve tavlamanın film yapısına etkileri, 2008 - 2010
ÖZDEMİR O., Other International Funding Programs, PECVD YÖNTEMİYLE BÜYÜTÜLMÜŞ BOR NİTRÜR FİLİMLERİN,
2008 - 2010
ÖZDEMİR O., CHOI F. P., Project Supported by Higher Education Institutions, Metal-yarıiletken yapıların elektriksel
özelliklerinin incelenmesi, 2007 - 2009

Peer Reviews in Scientific Publications

Surface roughness and optoelectronic properties of intrinsic and doped nc-Si:H prepared by rf-magnetron sputtering at
low temperature, SCI Journal, February 2014
Journal of Non-Crystalline Solids, SCI Journal, January 2000

Metrics

Publication: 143
Citation (WoS): 266
Citation (Scopus): 282
H-Index (WoS): 9
H-Index (Scopus): 9