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Address: Çanakkale Onsekiz Mart Üniversitesi Fen Edebiyat Fakültesi Fizik Bölümü Terzioğlu Yerleşkesi 17020 ÇANAKKALE

Education Information

Doctorate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Fizik, Turkey 1998 - 2003

Post Graduate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Fizik, Turkey 1996 - 1998

Under Graduate, Eskisehir Osmangazi University, Fen Edebiyat Fakültesi, Fizik, Turkey 1992 - 1996

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, ZnO Filmlerinin Bazı Elektrik, Optik, Yapısal ve Yüzeysel Özellikleri Üzerine Kalay Katkısının Etkisi , Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Fizik, 2003

Post Graduate, Ultrasonik Spray Pyrolysis Metodu İle Farklı Taban Sıcaklıklarında Elde Edilen CdS Filmlerinin Bazı Fiziksel Özelliklerinin İncelenmesi , Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Fizik, 1998

Research Areas

Electrical and Electronics Engineering, MEMS, Optoelectronic Materials and Devices, Semiconducting Materials and Devices, Mechanical Engineering, Energy, Solar energy, Physics, Interdisciplinary Physics and Related Science and Technology Areas, Materials Science, Condensed Matter 1: Structural, Mechanical and Thermal Properties, Surfaces, Interfaces, Thin Films and Nanosystems, Intensive Article 2: Electronic Structure, Electric, Magnetic and Optical Properties, Electrical properties of electronic structures, interfaces, thin films and low-dimensional structures, Magnetic Properties and Materials, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Professor, Canakkale Onsekiz Mart University, Fen Edebiyat Fakültesi, Fizik, 2015 - Continues

Associate Professor, Canakkale Onsekiz Mart University, Fen Edebiyat Fakültesi, Fizik, 2007 - 2015

Associate Professor, Eskisehir Osmangazi University, Fen Edebiyat Fakültesi, Fizik, 2007 - 2007

Research Assistant PhD, Eskisehir Osmangazi University, Fen Edebiyat Fakültesi, Fizik, 2003 - 2007

Research Assistant, Eskisehir Osmangazi University, Fen Edebiyat Fakültesi, Fizik, 1997 - 2003

ADVISING TESISES

- BİLGİN V., Fotovoltaik Güneş Hücrelerinde Kullanılabilecek n-CdS:F Ve p-PbS:Ag İnce Filmlerinin Üretimi Ve Karakterizasyonu, Doctorate, E.Sarıca(Student), 2017
- BİLGİN V., Fotovoltaik Uygulamalar için Ultrasonik Spray Pyrolysis Tekniği ile Üretilen CdO:Pb ve CuO:In İnce Filmlerin Karakterizasyonu, Doctorate, B.Demirselçuk(Student), 2017
- BİLGİN V., Ultrasonik Kimyasal Püskürtme ile Üretilen Vanadyum Oksit Filmleri: Taban Sıcaklığının Etkisi, Post Graduate, H.Hakan(Student), 2016
- BİLGİN V., Fotovoltaik Güneş Gözesi Uygulamaları için Cd_{1-x}Zn_xS İnce Filmlerinin Büyütülmesi ve Karakterizasyonu, Post Graduate, T.Yapan(Student), 2014
- BİLGİN V., Ultrasonik Kimyasal Püskürtme Tekniği ile Vanadyum Katkılı ZnO Filmlerinin Büyütülmesi ve Karakterizasyonu, Post Graduate, E.Sarıca(Student), 2012
- BİLGİN V., ZnO İnce Filmleri: Co Katkısının Etkisi, Post Graduate, B.Demirselçuk(Student), 2010

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

- I. **Phase transition of ultrasonically sprayed VO_x thin films: The role of substrate temperature**
Sarica E., BİLGİN V., AKYÜZ İ.
OPTİK, vol.228, 2021 (Journal Indexed in SCI)
- II. **Characterization of CdS films and CdS/Si heterojunctions prepared by ultrasonic spray pyrolysis and their response to light**
BİLGİN V., Sarica E., DEMİRSELÇUK B., ERTÜRK K.
PHYSICA B-CONDENSED MATTER, vol.599, 2020 (Journal Indexed in SCI)
- III. **Iron doped ZnO thin films deposited by ultrasonic spray pyrolysis: structural, morphological, optical, electrical and magnetic investigations**
BİLGİN V., Sarica E., DEMİRSELÇUK B., Turkyilmaz S.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.29, no.20, pp.17542-17551, 2018 (Journal Indexed in SCI)
- IV. **Effect of Pb:S molar ratio in precursor solution on the properties of lead sulphide thin films by ultrasonic spray pyrolysis**
Sarica E., BİLGİN V.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.71, pp.42-49, 2017 (Journal Indexed in SCI)
- V. **Study of some physical properties of ultrasonically spray deposited silver doped lead sulphide thin films**
Sarica E., BİLGİN V.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.68, pp.288-294, 2017 (Journal Indexed in SCI)
- VI. **Structural, optical, electrical and magnetic studies of ultrasonically sprayed ZnO thin films doped with vanadium**
Sarica E., BİLGİN V.
SURFACE & COATINGS TECHNOLOGY, vol.286, pp.1-8, 2016 (Journal Indexed in SCI)
- VII. **Ultrasonically sprayed ZnO:Co thin films: Growth and characterization**
DEMİRSELÇUK B., BİLGİN V.
APPLIED SURFACE SCIENCE, vol.273, pp.478-483, 2013 (Journal Indexed in SCI)
- VIII. **Some physical properties of In doped copper oxide films produced by ultrasonic spray pyrolysis**
Kose S., Ketenci E., BİLGİN V., Atay F., Akyuz I.
CURRENT APPLIED PHYSICS, vol.12, no.3, pp.890-895, 2012 (Journal Indexed in SCI)
- IX. **Growth, Electrical, and Optical Study of ZnS:Mn Thin Films**
OZUTOK F., Erturk K., BİLGİN V.
ACTA PHYSICA POLONICA A, vol.121, no.1, pp.221-223, 2012 (Journal Indexed in SCI)
- X. **Influence of Annealing Temperature on the Electrical and Optical Properties of CdS Thin Films**
ELMAS S., ÖZCAN S., ÖZDER S., BİLGİN V.
ACTA PHYSICA POLONICA A, vol.121, no.1, pp.56-58, 2012 (Journal Indexed in SCI)

- XI. **Study of Ultrasonically Sprayed ZnO Films: Thermal Annealing Effect**
OZUTOK F., DEMİRSELÇUK B., SARICA E., TURKYILMAZ S., BİLGİN V.
ACTA PHYSICA POLONICA A, vol.121, no.1, pp.53-55, 2012 (Journal Indexed in SCI)
- XII. **Optical, structural and surface characterization of CdO:Mg films**
Atay F., Akyuz I., Kose S., Ketenci E., BİLGİN V.
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.22, no.5, pp.492-498, 2011 (Journal Indexed in SCI)
- XIII. **Optical, structural and surface characterization of ultrasonically sprayed CdO:F films**
Akyuz I., Kose S., Ketenci E., BİLGİN V., Atay F.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.509, no.5, pp.1947-1952, 2011 (Journal Indexed in SCI)
- XIV. **Electrical, structural and surface properties of fluorine doped tin oxide films**
BİLGİN V., Akyuz I., Ketenci E., Kose S., Atay F.
APPLIED SURFACE SCIENCE, vol.256, no.22, pp.6586-6591, 2010 (Journal Indexed in SCI)
- XV. **Optical characterization of SnO₂:F films by spectroscopic ellipsometry**
Atay F., BİLGİN V., Akyuz I., Ketenci E., Kose S.
JOURNAL OF NON-CRYSTALLINE SOLIDS, vol.356, pp.2192-2197, 2010 (Journal Indexed in SCI)
- XVI. **Optical characterization and determination of carrier density of ultrasonically sprayed CdS:Cu films**
Kose S., Atay F., BİLGİN V., Akyuz I., Ketenci E.
APPLIED SURFACE SCIENCE, vol.256, no.13, pp.4299-4303, 2010 (Journal Indexed in SCI)
- XVII. **Preparation and characterization of aluminum-incorporated cadmium oxide films**
Akyuz I., Kose S., Atay F., BİLGİN V.
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.13, no.2, pp.109-114, 2010 (Journal Indexed in SCI)
- XVIII. **Preparation and Characterization of Ultrasonically Sprayed Zinc Oxide Thin Films Doped with Lithium**
Bilgin V.
JOURNAL OF ELECTRONIC MATERIALS, vol.38, no.9, pp.1969-1978, 2009 (Journal Indexed in SCI)
- XIX. **Growth and Characterization of Zn-Incorporated Copper Oxide Films**
Engin M., Atay F., Kose S., BİLGİN V., Akyuz I.
JOURNAL OF ELECTRONIC MATERIALS, vol.38, no.6, pp.787-796, 2009 (Journal Indexed in SCI)
- XX. **In doped CdO films: Electrical, optical, structural and surface properties**
Kose S., Atay F., BİLGİN V., Akyuz I.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.34, no.12, pp.5260-5266, 2009 (Journal Indexed in SCI)
- XXI. **Some physical properties of copper oxide films: The effect of substrate temperature**
Kose S., Atay F., BİLGİN V., Akyuz I.
MATERIALS CHEMISTRY AND PHYSICS, vol.111, pp.351-358, 2008 (Journal Indexed in SCI)
- XXII. **Prediction of optical parameters of Sn doped CdO films using neural network**
Erturk K., Kose S., Atay F., Bilgin V., AKYUZ I., HACIİSMAİLOĞLU M. C. , KÜÇÜK İ., DEREBAŞI N.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.10, no.2, pp.335-338, 2008 (Journal Indexed in SCI)
- XXIII. **The investigation of Cu doped CdS films produced by ultrasonic spray pyrolysis technique**
Atay F., Bilgin V., Akyuz I., Ketenci E., Kose S., Erturk K.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.10, no.2, pp.331-334, 2008 (Journal Indexed in SCI)
- XXIV. **The effect of annealing temperature on the structural and electrical properties of ultrasonically sprayed cadmium oxide films**
Akyuz I., Kose S., Atay F., Bilgin V.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.12, pp.3812-3815, 2007 (Journal Indexed in SCI)
- XXV. **Optical, structural and electrical properties of ultrasonically sprayed copper oxide films: the effect of Mg incorporation**
ATAY F., Bilgin V., AKYUZ I., KOSE S.

- JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.11, pp.3604-3608, 2007 (Journal Indexed in SCI)
- XXVI. **Some physical properties of ultrasonically sprayed tin oxide films: the effect of the substrate temperature**
 ATAY F., DEMİR M. K. , KOSE S., Bilgin V., AKYUZ I.
 JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, vol.9, no.7, pp.2217-2226, 2007 (Journal Indexed in SCI)
- XXVII. **Some physical properties of chemically sprayed Zn_{1-x}Cd_xS semiconductor films**
 AKYUZ I., KOSE S., ATAY F., Bilgin V.
 MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.10, pp.103-111, 2007 (Journal Indexed in SCI)
- XXVIII. **The optical, structural and morphological properties of ultrasonically sprayed ZnO : Mn films**
 AKYUZ I., KOSE S., ATAY F., Bilgin V.
 SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.21, no.12, pp.1620-1626, 2006 (Journal Indexed in SCI)
- XXIX. **Characterization of Mn-incorporated CdO films grown by ultrasonic spray pyrolysis**
 Bilgin V., Akyuz I., Kose S., Atay F.
 SEMICONDUCTOR SCIENCE AND TECHNOLOGY, vol.21, no.5, pp.579-585, 2006 (Journal Indexed in SCI)
- XXX. **The effect of substrate temperature on the structural and some physical properties of ultrasonically sprayed US films**
 Bilgin V., Kose S., Atay F., Akyuz I.
 MATERIALS CHEMISTRY AND PHYSICS, vol.94, no.1, pp.103-108, 2005 (Journal Indexed in SCI)
- XXXI. **The effect of Sn concentration on some physical properties of zinc oxide films prepared by ultrasonic spray pyrolysis**
 Bilgin V., Kose S., Atay F., Akyuz I.
 JOURNAL OF MATERIALS SCIENCE, vol.40, no.8, pp.1909-1915, 2005 (Journal Indexed in SCI)
- XXXII. **Wide-bandgap modification of polycrystalline ZnO using Sn component on the basis of developing quantum-well hetero-structure**
 Yildirim T., Gur E., Tuzemen S., Bilgin V., Kose S., Atay F., Akyuz I.
 PHYSICA E-LOW-DIMENSIONAL SYSTEMS & NANOSTRUCTURES, vol.27, pp.290-295, 2005 (Journal Indexed in SCI)
- XXXIII. **The effect of Zn concentration on some physical properties of tin oxide films obtained by ultrasonic spray pyrolysis**
 Bilgin V., Kose S., Atay F., Akyuz I.
 MATERIALS LETTERS, vol.58, no.29, pp.3686-3693, 2004 (Journal Indexed in SCI)
- XXXIV. **Some physical properties of CdO thin films used as window material in photovoltaic solar cells**
 KOSE S., ATAY F., Bilgin V., AKYUZ D.
 INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.1, no.3, pp.353-364, 2004 (Journal Indexed in SCI)
- XXXV. **The effect of In doping on some physical properties of CdS films**
 Atay F., Bilgin V., Akyuz I., Kose S.
 MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.6, no.4, pp.197-203, 2003 (Journal Indexed in SCI)
- XXXVI. **CdS : Ni films obtained by ultrasonic spray pyrolysis: effect of the Ni concentration**
 Atay F., Kose S., Bilgin V., Akyuz I.
 MATERIALS LETTERS, vol.57, pp.3461-3472, 2003 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Substrate temperature effect on the structural, morphological, optical and electrical properties of spray-deposited zinc sulphide thin films**
 DEMİRSELÇUK B., BİLGİN V., SARICA E., ÖZDER S.
 Turkish Physical Society 33rd International Physics Congress, 6 - 10 September 2017
- II. **Effect of Zn/S molar ratio on the physical properties of spray-pyrolysed ZnS thin films for photovoltaic applications**

DEMİRSELÇUK B., BİLGİN V., ÖZDER S., SARICA E.

Turkish Physical Society 33rd International Physics Congress, 6 - 10 September 2017

- III. **Fotovoltaik Uygulamalar için CdTe:Cu İnce Filmlerinin Fiziksel Özelliklerinin İncelenmesi**
DEMİRSELÇUK B., BİLGİN V., ERTÜRK K.
V. Ulusal Güneş ve Hidrojen Enerjisi Kongresi, Turkey, 12 - 13 May 2016
- IV. **Optical, Structural and Surface Characterization of Li Doped CdTe Thin Films**
DEMİRSELÇUK B., BİLGİN V.
Third European Conference on Renewable Energy Systems, 7 - 10 October 2015
- V. **Electrical properties of Sn doped CdS thin films grown by ultrasonic spray pyrolysis technique**
DEMİRSELÇUK B., BİLGİN V.
9th International Physics Conference of the Balkan Physical Union, 24 - 27 August 2015
- VI. **Electrical, optical and surface studies of CdS thin films doped with iron**
DEMİRSELÇUK B., SARICA E., BİLGİN V.
11th Nanoscience and Nanotechnology Conference, 22 - 25 June 2015
- VII. **Ultrasonically sprayed ZnO:Fe diluted magnetic semiconductor thin films: influence of Fe content on room temperature ferromagnetism**
DEMİRSELÇUK B., BİLGİN V., SARICA E.
11th Nanoscience and Nanotechnology Conference, 22 - 25 June 2015
- VIII. **CdS:Sn thin films grown by ultrasonic spray pyrolysis: Optical and surface studies**
DEMİRSELÇUK B., BİLGİN V.
11th Nanoscience and Nanotechnology Conference, 22 - 25 June 2015
- IX. **Fotovoltaik Güneş Gözesi Uygulamaları İçin CdO İnce Filmlerin Sol-Gel Spin Kaplama Yöntemi İle Büyütülmesi Ve Fiziksel Özellikleri Üzerine Tavlamanın Etkisi**
DEMİRSELÇUK B., SARICA E., SEL K., BİLGİN V.
14. Ulusal Optik, Elektro-Optik ve Fotonik Çalıştay, Turkey, 14 September 2012
- X. **Effect Of Thermal Annealing On The Electrical And Morphological Properties Of Indium Tin Oxide (Ito) Films**
DEMİRSELÇUK B., SARICA E., BİLGİN V.
Turkish Physical Society 28th International Physics Congress, 6 - 09 September 2011
- XI. **Growth and characterization of ZnO thin films doped with vanadium**
SARICA E., DEMİRSELÇUK B., BİLGİN V.
7th Nanoscience and Nanotechnology Conference, 27 June - 01 July 2011
- XII. **Thermal annealing effects on the morphology and electrical properties of ZnO thin films**
DEMİRSELÇUK B., SARICA E., ÖZÜTOK F., BİLGİN V.
7th Nanoscience and Nanotechnology Conference, 27 June - 01 July 2011
- XIII. **ZnO:Co İnce Filmlerinin Üretilmesi ve Fotoluminesans Özellikleri**
DEMİRSELÇUK B., SARICA E., GÜR E., BİLGİN V.
17. Yoğun Madde Fiziği (YMF17)-Ankara Toplantısı, Turkey, 05 November 2010
- XIV. **Preparation Of Undoped And Nickel Doped Zinc Oxide Films And Their Photoluminescence**
SARICA E., DEMİRSELÇUK B., GÜR E., BİLGİN V.
Turkish Physical Society 27th International Physics Congress, 14 - 17 September 2010
- XV. **The Magnetic And Surface Characterization Of Undoped And Ni Doped ZnO Thin Films**
DEMİRSELÇUK B., BİLGİN V., KÜÇÜK İ.
Turkish Physical Society 27th International Physics Congress, 14 - 17 September 2010
- XVI. **ZnO:Co Filmleri: Yapısal ve Yüzeysel Özellikler**
DEMİRSELÇUK B., BİLGİN V.
16. Yoğun Madde Fiziği (YMF16)-Ankara Toplantısı, Turkey, 06 November 2009
- XVII. **Ultrasonik Kimyasal Püskürtme Tekniği Kullanılarak Ni Katkılı ZnO İnce Filmlerinin Üretilmesi Ve Karakterizasyonu**
DEMİRSELÇUK B., BİLGİN V., ATAY F., AKYÜZ İ., KETENCİ E., KÖSE S.
Türk Fizik Derneği 26. Uluslararası Fizik Kongresi, 24 - 27 September 2009

- XVIII. **Co Katkısının ZnO İnce Filmlerinin Manyetik Ve Yüzeysel Özellikleri Üzerine Etkisi**
DEMİRSELÇUK B., BİLGİN V., KÜÇÜK İ.
Türk Fizik Derneği 26. Uluslararası Fizik Kongresi, 24 - 27 September 2009
- XIX. **ZnO:Ni İnce Filmleri: Elektrik ve Optik Özellikler**
DEMİRSELÇUK B., BİLGİN V., KÖSE S., ATAY F., AKYÜZ İ., KETENCİ E.
MYOMAT 2009: I. Ulusal Metal, Yarıiletken ve Oksit Materyallerin Üretiminde Kullanılan Sistemler ve Analiz Teknikleri Kongresi, Turkey, 15 - 16 June 2009
- XX. **Co Katkılı ZnO Filmlerinin Optik ve Elektrik Özellikleri**
DEMİRSELÇUK B., BİLGİN V.
MYOMAT 2009: I. Ulusal Metal, Yarıiletken ve Oksit Materyallerin Üretiminde Kullanılan Sistemler ve Analiz Teknikleri Kongresi, Turkey, 15 - 16 June 2009
- XXI. **Electrical, optical properties and surface morphology of ZnSe thin film grown by ultrasonic spray pyrolysis method**
BAYKUL M., KOSE S., Bilgin V.
2nd International Symposium on Blue Laser and Light Emitting Diodes (2nd ISBLLED), Chiba, Japan, 29 September - 02 October 1998, pp.516-519

Supported Projects

- KÜÇÜKARSLAN A., BİLGİN V., TUBITAK Project, ELEKTROSTATİK-ULTRASONİK SPRAY KAPLAMA SİSTEMİNİN TİCARİ PROTOTİP TASARIMI VE İMALATI, 2019 - Continues
- BİLGİN V., KÜÇÜKARSLAN A., TUBITAK Project, Elektrostatik-Ultrasonik Spray Pyrolysis Yarıiletken İnce Film Kaplama Sistemi Tasarımı ve Üretimi, 2016 - 2017
- BİLGİN V., TUBITAK Project, Ultrasonik Kimyasal Püskürtme Tekniği İle Hazırlanan N-Cds:Al/P-Si Hetero-Ekleminin Yapısal, Optiksel Ve Elektriksel Özellikleri, 2011 - 2012
- SEL K., DEMİRSELÇUK B., GÜNEŞ İ., BİLGİN V., Project Supported by Higher Education Institutions, Fotovoltaik güneş pili uygulamaları için CdO ve CuO filmlerinin sol-gel spin kaplama tekniği ile büyütülmesi ve karakterizasyonu, 2011 - 2012
- BİLGİN V., TUBITAK Project, Fotovoltaik Güneş Pili Uygulamaları İçin CdO:F, CdO:Mg, CuO:Al ve CuO:In Yarıiletken İnce Filmlerinin Ultrasonik Kimyasal Püskürtme Tekniği İle Üretilmesi ve Elektrik, Optik, Yapısal Ve Yüzeysel Özelliklerinin İncelenmesi, 2008 - 2010

Citations

Total Citations (WOS):851
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