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Education Information

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 1990 - 1995

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 1984 - 1987

Undergraduate, Inonu University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1979 - 1983

Dissertations

Doctorate, Bazı bileşiklerin kırmızı-ıltı ve raman spektroskopileri ile titreşim frekans ve kiplerinin saptanması, Gazi University, Fen Bilimleri Enstitüsü, Fizik (Dr), 1995

Postgraduate, He-Ne laserinin yapımı, Gazi University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 1986

Research Areas

Physics, Natural Sciences

Academic Titles / Tasks

Associate Professor, Gazi University, Fen Fakültesi, Fizik, 2020 - Continues

Assistant Professor, Gazi University, Fen Fakültesi, Fizik, 1998 - 2020

Assistant Professor, Gazi University, Fen Fakültesi, Fizik, 1984 - 1998

Academic and Administrative Experience

Vice Dean, Gazi University, Fen Fakültesi, Fizik, 2020 - 2021

Fakülte Yönetim Kurulu Üyesi, Gazi University, Fen Fakültesi, Fizik, 2016 - 2020

Fakülte Kurulu Üyesi, Gazi University, Fen Fakültesi, Fizik, 2016 - 2019

Courses

Fiz-162 Genel Fizik I, Undergraduate, 2017 - 2018, 2018 - 2019

Fiz-156 Fizik Lab., Undergraduate, 2017 - 2018, 2018 - 2019

FİZİK II, Undergraduate, 2017 - 2018

Grup Teorisine Giriş, Undergraduate, 2016 - 2017, 2017 - 2018

FZİK I, Undergraduate, 2017 - 2018

Fiz-103 Fizik I, Undergraduate, 2017 - 2018

Advising Theses

- Özbay A., Eş püskürtme tekniği ile büyütülen mgzno ince filmlerin yapısal ve optiksel karakterizasyonu, Postgraduate, N.BOZKURT(Student), 2016
- ÖZBAY A., The Structural And Optical Characterization Of Mgzno Thin Films By Magnetron Co-Sputtering, Postgraduate, N.Bozkurt(Student), 2016
- Özbay A., Free energy calculation of ion and ligand binding to membrane proteins, Doctorate, M.ÇAVUŞ(Student), 2013
- Özbay A., The study of vibration of 1,7-diaminoheptane molecule through theoretical methods, Postgraduate, M.ERKAN(Student), 2012
- Özbay A., Morpholine molekülünün yapısal ve elektroniksel özelliklerinin hesabı, Postgraduate, İ.YUNA(Student), 2010
- Özbay A., Flavone molekülünün yapısal ve elektroniksel özelliklerinin hesabı, Postgraduate, M.TÜRK(Student), 2010
- ÖZBAY A., THE STUDY OF VIBRATIONS OF FLAVONE MOLECULE THROUGH THEORETICAL METOD, Postgraduate, M.TÜRK(Student), 2010
- ÖZBAY A., MORPHOLİNE MOLEKÜLÜNÜN YAPISAL VE ELEKTRONİKSEL ÖZELLİKLERİNİN HESABI, Postgraduate, İ.YUNA(Student), 2010
- Özbay A., Tiyenil oksazol ve tiyenil izoksazol molekülünün yapısal, elektronik ve çizgisel olmayan optik özelliklerinin teorik incelenmesi, Postgraduate, R.ÖLÇER(Student), 2009
- Özbay A., THE STUDY OF VIBRATION OF 1,4-DIAMINO BUTANE MOLECULE THROUGH THEORETICAL METHODS, Postgraduate, A.GÖZÜTOK(Student), 2009
- ÖZBAY A., THEORETICAL INVESTIGATION OF ELECTRONIC AND NONLINEAR OPTICAL PROPERTIES OF THIOPHENE MOLECULES, Postgraduate, R.ÖLÇER(Student), 2009
- ÖZBAY A., THE INVESTIGATION OF FREQUENCY AND RADIATION DEPENDENT OF MAIN PHYSICAL PARAMETRES OF Al/SiO₂/p-Si (MIS) STRUCTURES, Postgraduate, İ.TAŞÇIOĞLU(Student), 2008
- Özbay A., Işığa duyarlı yarıiletken gaz boşalma yapısının özellikleri, Postgraduate, K.AKTAŞ(Student), 2008
- Özbay A., Al/SiO₂/p-Si (MIS) yapılarında temel fiziksel parametrelerin frekansa ve radyasyona bağlı incelenmesi, Postgraduate, İ.TAŞÇIOĞLU(Student), 2008
- Özbay A., 1,5 diaminopentan molekülünün titreşim spektrumlarının teorik yöntemlerle incelenmesi, Postgraduate, E.AL BAYRAK(Student), 2007
- Özbay A., Bazı Hofmann-tipi konak-konuk bileşiklerinin kırmızı-altı spektroskopisi ile incelenmesi, Postgraduate, İ.HAKAN(Student), 2006
- Özbay A., 1,8-diaminooktan molekülünün titreşim spektrumunun teorik olarak incelenmesi, Postgraduate, N.ZAFER(Student), 2006
- Özbay A., 1,6-diaminohekzan molekülünün titreşim spektrumlarının teorik yöntemler ile incelenmesi, Postgraduate, E.TONGUÇ(Student), 2006
- Özbay A., Bazı Hofmann tipi konak-konuk bileşenlerinin infrared spektroskopisi ile incelenmesi, Postgraduate, Z.A. (Student), 2003
- Özbay A., Hofmann-Td tipi konak-konuk bileşiklerinin titreşim spektroskopisi ile incelenmesi, Postgraduate, T.POLAT(Student), 2003
- Özbay A., Hofmann-tipi konak-konuk bileşenlerinin kırmızı-altı spektroskopisi ile incelenmesi, Postgraduate, T.S. (Student), 2003

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

- Density functional calculations on the structural and vibrational properties of 1,4-diaminobutane**
Özbay A., Gozutok A.
JOURNAL OF MOLECULAR STRUCTURE, vol.1199, 2020 (Journal Indexed in SCI)

- II. **The role of Co-60 gamma-ray irradiation on the interface states and series resistance in MIS structures**
Tascioglu I, Tataroğlu A, Özbay A, Altındal Ş.
RADIATION PHYSICS AND CHEMISTRY, vol.79, pp.457-461, 2010 (Journal Indexed in SCI)
- III. **Infrared spectroscopic study on the Hofmann-dadn-type and the T-d-dahxn-type clathrates**
Ozbay A., Saglam S., Sertbakan T. R. , KASAP E., Ozcelik S.
JOURNAL OF INCLUSION PHENOMENA AND MACROCYCLIC CHEMISTRY, vol.58, pp.49-54, 2007 (Journal Indexed in SCI)
- IV. **Investigation of host-guest interactions in the hofmann-daddn-type clathrates: M(1,12-diaminododecane)Ni(CN)₄.G (M = Co, Ni or Cd; G = toluene, m-xylene, o-xylene or p-xylene)**
Sertbakan T., Saglam S., Ozbay A., Ozcelik S.
Journal of Inclusion Phenomena, vol.49, pp.235-240, 2004 (Journal Indexed in SCI Expanded)
- V. **Infrared spectroscopic study of the Hofmann-daon-type clathrates: M(1,8-diaminooctane)Ni(CN)₄center dot G (M = Co, Ni or Cd; G = Aromatic guest molecules)**
Kasap E., Ozbay A.
JOURNAL OF INCLUSION PHENOMENA AND MOLECULAR RECOGNITION IN CHEMISTRY, vol.28, pp.335-347, 1997 (Journal Indexed in SCI)
- VI. **Infrared and Raman spectroscopic study of the Hofmann-type clathrates M(1,7-diaminoheptane)Ni(CN)₄.G (M = Ni or Co; G = chlorobenzene, m-xylene or naphthalene)**
Kasap E., Ozbay A., Ozcelik S.
Journal of Molecular Structure, pp.425-430, 1997 (Journal Indexed in SCI Expanded)
- VII. **Infrared spectroscopic study of the Hofmann-diam-type clathrates : M(1,6-diaminohexane)Ni(CN)₄.C₆H₆ (M=Ni, Co or Cd)**
Kasap E., Ozbay A., Ozcelik S.
Spectroscopy Letters, vol.30, pp.491-496, 1997 (Journal Indexed in SCI Expanded)
- VIII. **VIBRATIONAL SPECTROSCOPIC STUDIES OF 2,4-LUTIDINE METAL(II) TETRACYANONICKELATE COMPLEXES**
OZBAY A., YURDAKUL Ş.
JOURNAL OF MOLECULAR STRUCTURE, vol.349, pp.13-16, 1995 (Journal Indexed in SCI)
- IX. **VIBRATIONAL SPECTROSCOPIC STUDIES OF 3,4-LUTIDME METAL .2. TETRACYANONICKELATE COMPLEXES**
OZBAY A., YURDAKUL Ş.
SPECTROSCOPY LETTERS, vol.28, no.4, pp.611-619, 1995 (Journal Indexed in SCI)
- X. **AN INFRARED AND RAMAN-SPECTROSCOPIC STUDY ON TRANSITION-METAL DIISOQUINOLINE TETRACYANONICKELATE COMPLEXES**
OZBAY A., YURDAKUL Ş.
JOURNAL OF MOLECULAR STRUCTURE, vol.293, pp.77-80, 1993 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Combined Vibrational Spectroscopic and Quantum Chemical Investigations of 1,8-diaminooctane**
ÖZBAY A., GÖZÜTOK A.
Celal Bayar University journal of Science, vol.15, no.1, pp.119-123, 2019 (Other Refereed National Journals)
- II. **ET DEKONTAMİNASYONUNDA ELEKTRON DEMETİŞİNLAMASI (EDI) KULLANIMI**
ÖZBAY S., ÖZBAY A.
Journal of Food and Health Science, vol.1, no.4, pp.178-184, 2015 (Other Refereed National Journals)
- III. **Vibrational spectroscopic study of the hofmann-diam-type clathrates M(1,7-diaminoheptane) Ni (CN)₄. G (M=Ni or Cu G=Benzene, 1,2-dichlorobenzene, p-xylene, o-xylene, toluene)**
ÖZBAY A., Reshid Muzefferi T. S.
Bulletin of pure and applied sciences, vol.31, no.1, pp.42-47, 2012 (Refereed Journals of Other Institutions)

- IV. **Vibrational spectroscopic Study on Hofmann-Td-Type Complexes: $M(3,4\text{-lutidine})_2M'_{xx}(\text{CN})_4$ ($M=\text{Mn(II)}$ or Cd(II) , $M'_{xx}=\text{Cd(II)}$ or Hg(II))**
 Özbay A., Yurdakul Ş.
 Gazi University Journal of Science, vol.16, no.4, pp.687-690, 2003 (Other Refereed National Journals)
- V. **An infrared and Raman spectroscopic study of some isoquinoline metal (II) tetracyanonickelate complexes**
 ÖZBAY A., YURDAKUL Ş.
 ARI, vol.50, no.1, pp.223-226, 1997 (Refereed Journals of Other Institutions)

Refereed Congress / Symposium Publications in Proceedings

- I. **A Density Functional Calculations On The Geometrical Electronic And Nonlinear Optical Properties Of Hexamethylenediamine**
 Özbay A., Gözütok A.
 International Conference On Engineering Technologies (ICENTE'xx20), Konya, Turkey, 19 - 21 November 2020
- II. **Density Functional Theory study on the Structural and Vibrational Properties of 1,5 - diaminopentane**
 Gözütok A., Özbay A.
 International Conference on Engineering Technologies(ICENTE19), Konya, Turkey, 25 - 27 October 2019
- III. **QUANTUM CHEMICAL STUDIES OF SOME DIAMINE DERIVATIONS: THEORETICAL INVESTIGATION**
 Sağlam S., Başköse C., Özbay A., Taşcıoğlu İ.
 THERMAM 2019, İzmir, Turkey, 22 - 24 September 2019
- IV. **Theoretical Calculations on Structural Properties of 1,8-diaminooctane**
 Özbay A.
 3. Organik Elektronik Çalıştayı, Amasya, Turkey, 22 - 23 November 2018
- V. **Theoretical studies of N, N'xx-tetrachloro 1,4-Diaminobutane and N, N'xx-Tetrabromo 1,4 Diaminobutane**
 Gözütok A., Özbay A.
 International Conference on Engineering Technologies, Konya, Turkey, 26 - 28 October 2018
- VI. **Theoretical Calculations on Structural properties of 1,4-Diaminobutane**
 Gözütok A., Özbay A.
 International Conference of Engineering Technologies, Konya, Turkey, 26 - 28 October 2018
- VII. **ELECTRONIC AND OPTICAL PROPERTIES OF MONO AND DI FLUORO PYRROLES**
 ÖZBAY A., BAHAT M.
 INTERNATIONAL CONFERENCEON ENGINEERING TECHNOLOGIES, 7 - 09 October 2017
- VIII. **TORSIONAL ANALYSIS OF BIPYRIMIDINE MOLECULES**
 ÇİFTÇİ H., BAHAT M., ÖZBAY A.
 INTERNATIONAL CONFERENCEON ENGINEERING TE,CHNOLOGIES, 7 - 09 August 2017
- IX. **STRUCTURE AND ELECTRONIC PROPERTIES OF $\text{C}_{42}\text{H}_{12}\text{N}_6$ MOLECULE AND ITSSUBSTRUCTURES**
 BAHAT M., ÖZBAY A., ÖZİŞİK H., ATEŞER E.
 INTERNATIONAL CONFERENCEON ENGINEERING TE,CHNOLOGIES, 7 - 09 August 2017
- X. **Structure, electronic and non linear optical properties of some bipyrimidines**
 Güney M. N. , BAHAT M., ÖZBAY A.
 Türk Fizik Derneği 22. Uluslararası Fizik Kongresi, 6 - 09 October 2016
- XI. **Structure, Electronic and Nonlinear Optical Properties of Furyloxazoles and Thienyloxazoles**
 DAĞLI Ö., Gök R., BAHAT M., ÖZBAY A.
 International Physics Conference at the Anatolian Peak (IPCAP), Erzurum, Turkey, 25 - 27 February 2016, vol.707
- XII. **A Computational Study on The Electronic and Nonlinear Optical Properties of Graphyne Subunit**
 BAHAT M., Güney M. N. , ÖZBAY A.
 9th International Physics Conference of the Balkan-Physical-Union (BPU), İstanbul, Turkey, 24 - 27 August 2015, vol.1722

- XIII. **MgZnO filmlerinin eş-püskürtme sistemi ile büyütülmesi: yapısal ve optik karakterizasyon**
bozkurt n., Efker H. İ. , Akın N., ÖZBAY A., ÖZÇELİK S.
21. Yoğun madde fiziği Ankara Toplantısı, Turkey, 25 December 2015
- XIV. **C30H12 ve C12B9N9H12 moleküllerinin ve bazı floro türevlerinin elektronik ve çizgisel olmayan optik özellikleri**
Güney M. N. , Aydın B., BAHAT M., ÖZBAY A.
21. Yoğun Madde Fiziği Ankara Toplantısı, Turkey, 25 December 2015
- XV. **A DENSITY FUNCTIONAL CALCULATIONS ON THE GEOMETRICAL, ELECTRONIC AND NONLINEAR OPTICAL PROPERTIES OF THIENYL OXAZOLES AND THIENYLISOXAZOLES**
Olçer R., BAHAT M., ÖZBAY A.
TURK FİZİK DERNEĞİ 25. ULUSLARARASI FİZİK KONGRESİ, 25 - 29 August 2008
- XVI. **On the profile of frequency dependent interface states and series resistance in Al/SiO₂/P-Si (MisStructure)**
SAĞLAM S., TAŞÇIOĞLU İ., ÖZBAY A.
5. Uluslararası Bilim Teknik Konferansı: Fiziğin Güncel Problemleri, 25 June 2008 - 27 June 2018
- XVII. **ON THE PROFILE OF ⁶⁰Co γ-RAY IRRADIATION DEPENDENT INTERFACE STATES AND SERIES RESISTANCE IN Al/SiO₂/p-Si (MIS) STRUCTURES**
ALTINDAL Ş., TAŞÇIOĞLU İ., ÖZBAY A.
5. Uluslararası Bilim Teknik Konferansı: Fiziğin Güncel Problemleri, 25 - 27 June 2008
- XVIII. **Vibrational spectroscopic study on Hofmann Td type Clathrates: Cd(1,8-Diaminooctane)Hg(CN)₄.G (G=Benzene, 1,2-,1,3-Dichlorobenzene, O-M-P-Xylene)**
ÖZBAY A., Polat T., SAĞLAM S., SERTBAKAN T. R. , KASAP E.
5th. general conference of the Balkan Physics Union, 25 - 29 August 2003
- XIX. **Comparing of Host-Guest interaction in the Hofmann-1,10 Diaminododecane-type and Hofmann -1,12 Diaminododecane-type clathrates**
SAĞLAM S., SERTBAKAN T. R. , ÖZBAY A., ÖZÇELİK S., KASAP E.
XXVI European Congress on Molecular Spectroscopy, 1 - 06 October 2002
- XX. **Vibrational spectroscopic studies on the Td-Type Clathrates : Cd(1,6-Diaminohexane) M(CN)₄C₆H₆ (M=Cd or Hg)**
SAĞLAM S., ÖZBAY A., KASAP E., ÖZÇELİK S.
XXVI European Congress on Molecular Spectroscopy, 1 - 06 October 2002
- XXI. **Transition metal halide complexes of 2,5-dimethylaniline: A study of Infrared Spectroscopy**
ÖZÇELİK S., Döner A. R. , SAĞLAM S., ÖZBAY A.
XXVI European Congress on Molecular Spectroscopy, 1 - 06 October 2002
- XXII. **Investigation of Host-Guest interaction in the Hofmann -daddn-type clathrates: M(1,12-Diaminododecane)Ni(CN)₄. G (M=Co, Ni or Cd G=Toluene, o-Xylene, m-Xylene, p-Xylene)**
SERTBAKAN T. R. , SAĞLAM S., ÖZBAY A., ÖZÇELİK S.
XXVI European Congress on Molecular Spectroscopy, 1 - 06 October 2002
- XXIII. **Infrared spectroscopic study on the Hofmann-dadn-type clathrates: M(1,10-Diaminododecane)Ni(CN)₄.1,5G (M=Co, Ni or Cd G=o-Xylene, m-xylene, p-xylene)**
ÖZBAY A., SERTBAKAN T. R. , SAĞLAM S., KASAP E.
XXVI European Congress on Molecular Spectroscopy, 1 - 06 October 2002
- XXIV. **Vibrational spectroscopic study on Hofmann-Td-type complexes: M(3,4-Lutidine)₂M'xx(CN)₄. (M=Mn(II) or Cd(II), M'xx=Cd(II) or Hg(II))**
ÖZBAY A., YURDAKUL Ş.
Colloquium Spectroscopicum Internationale XXXI, 5 - 10 October 1999
- XXV. **AN INFRARED AND RAMAN SPECTROSCOPIC STUDY ON SOME ISOQUINOLINE METAL(II) TETRACYANONICKELATE COMPLEXES**
ÖZBAY A., YURDAKUL Ş.
International Symposium on Lasers, Atomic and Molecular Physics, 16 - 20 October 1997
- XXVI. **Infrared and Raman Spectroscopic study of Hofmann-type Clathrates: M(1,7-**

- Diaminoheptane)Ni(CN)₄. G (M=Ni or Co G=Chlorobenzene, m-xylene and Naphtalene)**
KASAP E., ÖZÇELİK S., ÖZBAY A.
XXIII European congress on Molecular Spectroscopy, 25 - 30 August 1996
- XXVII. **Infrared and Raman Spectroscopic Studies on the Hofmann-type Benzene Clathrates: M(1,7-diaminoheptane) Ni(CN)₄. G.(M= Ni or Co G=Chlorobenzene, m-Xylene or Naphtalene)**
KASAP E., ÖZBAY A., ÖZÇELİK S.
XXIII European Congress on Molecular Spectroscopy, Hungary, 25 - 30 August 1996
- XXVIII. **Hofmann-tipi Konak-Konuk Bileşiklerinin İnfrared ve Raman Spektroskopisi Çalışması: M(1,5-Diaminopentan)Ni(CN)₄. Benzen (M=Cd, Ni veya Co)**
KASAP E., ÖZBAY A., ÖZÇELİK S.
1. Ulusal Atom ve Molekül Fizik Sempozyumu, Turkey, 24 - 26 June 1996
- XXIX. **Hofmann-tipi Konak-Konuk Bileşiklerinin İnfrared ve Raman Spektroskopisi Çalışması: M(1,7-diaminoheptane) Ni(CN)₄. G.(M= Cd, Ni or Co)**
KASAP E., ÖZBAY A., ÖZÇELİK S.
I. Ulusal Atom ve Molekül Fizik Sempozyumu, Turkey, 24 - 26 June 1996
- XXX. **An IR and Raman spectroscopic study on Hofmann-Td-Type complexes: M(3,4-Lutidine)₂M'xx(CN)₄ (M=Mn(II) or Cd(II), M'xx=Cd(II) or Hg(II))**
ÖZBAY A., YURDAKUL Ş., Kantarcı Z.
22nd European Congress on Molecular Spectroscopy, 11 - 16 October 1994
- XXXI. **Diizokinolin-Metal(II) tetrasiyonikelat komplekslerinin Kırmızı-Altı Çalışması**
ÖZBAY A., YURDAKUL Ş.
13. Ulusal Fizik Kongresi, Turkey, 30 September - 02 October 1992
- XXXII. **AN INFRARED AND RANAN SPECTROSCOPIC STUDYOJ'xxT TRANSITION r.t!ETAL DIISOQUINOLiI\TETETRACYANONICKELATE CON~LEXES**
ÖZBAY A., YURDAKUL Ş.
XXI. EUROPEAN CONGRESS ON MOLECULAR SPECTROSCOPY, 23 - 28 August 1992

Supported Projects

- ÖZBAY A., Project Supported by Higher Education Institutions, Çinko Katkılı Aliminyum Özelliklerine Tavlama Etkileirinin İncelenmesi, 2006 - Continues
- ÖZBAY A., Project Supported by Higher Education Institutions, Bazı organik moleküllerin spektroskopik özelliklerinin teorik ve deneysel yöntemlerle incelenmesi, 2017 - 2019
- Özbay A., Project Supported by Higher Education Institutions, Teknolojik Olarak Önemli Olan Bazı Moleküllerin Yapısal Elektronik ve Çizgisel Olmayan Optik Özelliklerinin Hesaplanması, 2008 - 2009
- Özbay A., Project Supported by Higher Education Institutions, Çinko Katkılı Aliminyum Özelliklerine Tavlama Etkilerinin İncelenmesi, 2006 - 2007
- Özbay A., Yurdakul Ş., Güllüoğlu M. T. , Bahat M., TUBITAK Project, Bazı Ligand Metal (II) Tetrasiyanonikel Komplekslerinin yapılarının İnfrared ve Raman Spektroskopileri ile İncelenmesi, 1992 - 1996

Citations

Total Citations (WOS):67

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