

Assoc. Prof. HACER GÜMÜŞ

Personal Information

Office Phone: [+90 262 351 3437](tel:+902623513437) Extension: 133

Fax Phone: [+90 262 351 3629](tel:+902623513629)

Email: hacer.gumus@kocaeli.edu.tr

Web: <https://avesis.kocaeli.edu.tr/hacer.gumus>



Education Information

Doctorate, Sakarya Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2009 - 2013

Post Graduate, Kocaeli University, Fen Bilimleri Enstitüsü, Fizik, Turkey 2005 - 2008

Under Graduate, Kocaeli Üniversitesi, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2001 - 2005

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, Bazı piridin ve pirimidin bileşiklerinin geometrik, elektronik ve spektroskopik özelliklerinin teorik olarak incelenmesi, Sakarya Üniversitesi, Fen Bilimleri Enstitüsü, Fizik (Dr), 2013

Post Graduate, Flurbiprofen molekülü ve metal komplekslerinin deneysel ve teorik incelenmesi, Kocaeli University, Fen Bilimleri Enstitüsü, Fen Bilimleri Enstitüsü, 2008

Research Areas

Physics, Atomic and Molecular Physics, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Kocaeli Üniversitesi, Gölcük Meslek Yüksekokulu, 2018 - Continues

Assistant Professor, Kocaeli Üniversitesi, Gölcük Meslek Yüksekokulu, 2016 - 2018

Academic and Administrative Experience

Head of Department, Kocaeli University, Gölcük Meslek Yüksekokulu, Pazarlama Ve Reklamcılık Bölümü, 2016 - 2020

Courses

mukavemet, Associate Degree, 2018 - 2019

matematik, Associate Degree, 2017 - 2018
mesleki ingilizce, Associate Degree, 2017 - 2018
bilgisayar, Associate Degree, 2017 - 2018

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

- I. **Conformational, spectroscopic, electric and electronic investigations on 5-nitropyridine-2-hydrazino-3-carbonitrile-6-methyl-4-(methoxymethyl) (molecule 2): Molecular docking study**
Gumus H.
JOURNAL OF MOLECULAR STRUCTURE, vol.1211, 2020 (Journal Indexed in SCI)
- II. **Spectroscopic (Vibrational and NMR) Characterizations and Molecular Docking Analysis of Zn(II), Cd(II) and Hg(II) Complexes with Alkyl-Aryl Dithiocarbamates**
GÜMÜŞ H.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.45, no.6, pp.4929-4937, 2020 (Journal Indexed in SCI)
- III. **A Theoretical Study on Structural, Spectroscopic, Electronic and Nonlinear Optical Properties of 1-[(E)-{4-(Morpholin-4-Yl)Phenyl}Imino]Methyl]Naphthalen-2-ol**
Gumus H., Tamer O., Avci D., Atalay Y., TARCAN E.
BRAZILIAN JOURNAL OF PHYSICS, vol.46, no.5, pp.471-480, 2016 (Journal Indexed in SCI)
- IV. **Density functional theory calculations on conformational, spectroscopic and electrical properties of 3-(2,3-dimethoxyphenyl)-1-(pyridin-2-yl)prop-2-en-1-one: a potential nonlinear optical material**
Gumus H., Tamer O., Avci D., Atalay Y.
INDIAN JOURNAL OF PHYSICS, vol.90, pp.79-89, 2016 (Journal Indexed in SCI)
- V. **A theoretical study on 2-chloro-5-(2-hydroxyethyl)-4-methoxy-6-methylpyrimidine by DFT/ab initio calculations**
Gumus H., Tamer O., Avci D., Atalay Y.
MATERIALS SCIENCE-POLAND, vol.33, pp.369-380, 2015 (Journal Indexed in SCI)
- VI. **Theoretical Investigations on Nonlinear Optical and Spectroscopic Properties of 6-(3,3,4,4,4-Pentafluoro-2-hydroxy-1-butenyl)-2,4-pyrimidinedione: An Efficient NLO Material**
Gumus H., Tamer O., Avci D., TARCAN E., Atalay Y.
RUSSIAN JOURNAL OF PHYSICAL CHEMISTRY A, vol.88, no.13, pp.2348-2358, 2014 (Journal Indexed in SCI)
- VII. **Effects of donor-acceptor groups on the structural and electronic properties of 4-(methoxymethyl)-6-methyl-5-nitro-2-oxo-1, 2-dihydropyridine-3-carbonitrile**
Gumus H., Tamer O., Avci D., Atalay Y.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.132, pp.183-190, 2014 (Journal Indexed in SCI)
- VIII. **Quantum chemical calculations on the geometrical, conformational, spectroscopic and nonlinear optical parameters of 5-(2-Chloroethyl)-2,4-dichloro-6-methylpyrimidine**
Gumus H., Tamer O., Avci D., Atalay Y.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.129, pp.219-226, 2014 (Journal Indexed in SCI)
- IX. **Theoretical Investigation of 6-(3,3,4,4,4-Pentafluoro-2-Hydroxy-1-Butenyl)-2,4-Dimethoxy-Pyrimidine Molecule**
Pir H., Gunay N., Avci D., Tamer O., TARCAN E., Atalay Y.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.39, no.7, pp.5799-5814, 2014 (Journal Indexed in SCI)
- X. **Theoretical investigation of 5-(2-Acetoxyethyl)-6-methylpyrimidin-2, 4-dione: Conformational study, NBO and NLO analysis, molecular structure and NMR spectra**
Pir H., Gunay N., Tamer O., Avci D., Atalay Y.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.112, pp.331-342, 2013 (Journal Indexed in SCI)
- XI. **Quantum chemical computational studies on bis-thiourea zinc acetate**

- Pir H., Gunay N., Tamer O., Avci D., TARCAN E., Atalay Y.
MATERIALS SCIENCE-POLAND, vol.31, no.3, pp.357-371, 2013 (Journal Indexed in SCI)
- XII. **NLO and NBO Analysis of Sarcosine-Maleic Acid by Using HF and B3LYP Calculations**
Gunay N., Pir H., Avci D., Atalay Y.
JOURNAL OF CHEMISTRY, 2013 (Journal Indexed in SCI)
- XIII. **Study of the solvent effects on the molecular structure and C=O stretching vibrations of flurbiprofen**
TEKİN N., Pir H., Sagdinc S.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.98, pp.122-131, 2012
(Journal Indexed in SCI)
- XIV. **Quantum chemical computational studies on bithiourea zinc chloride**
Pir H., Gunay N., Avci D., Atalay Y.
INDIAN JOURNAL OF PHYSICS, vol.86, pp.1049-1063, 2012 (Journal Indexed in SCI)
- XV. **Molecular structure, vibrational spectra, NLO and NBO analysis of bis(8-oxy-1-methylquinolinium) hydroiodide**
Pir H., Gunay N., Avci D., Atalay Y.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.96, pp.916-924, 2012
(Journal Indexed in SCI)
- XVI. **Spectroscopic and DFT studies of flurbiprofen as dimer and its Cu(II) and Hg(II) complexes**
Sagdinc S., Pir H.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.73, no.1, pp.181-194,
2009 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **2- (2-hidroksi-5-metoksi-3-nitrobenziliden)-N-metilhidrazin-1-karbotioamid Molekülünün Kuantum Kimyasal Karakterizasyonu**
GÜMÜŞ H.
Muş Alparslan Üniversitesi Fen Bilimleri Dergisi, vol.7, no.1, pp.611-620, 2019 (Refereed Journals of Other Institutions)
- II. **Nikotinamid İçeren Çinko (II) Kompleksinin Moleküler Özellikleri ve Titreşim Spektrumu**
GÜMÜŞ H.
Gümüşhane Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.9, no.2, pp.254-261, 2019 (Refereed Journals of Other Institutions)
- III. **Theoretical calculations of LASO molecule by using DFT/B3LYP and DFT/HSEH1PBE levels**
GÜMÜŞ H.
Sakarya University Journal of Science, pp.1, 2018 (Refereed Journals of Other Institutions)
- IV. **3-hydroxy-4-hydroxyiminomethyl-5-hydroxymethyl-1,2-dimethylpyridinium iodide molekülünün geometrik yapısının incelenmesi**
GÜMÜŞ H., ATALAY Y.
SAÜ Fen Bilimleri Enstitüsü Dergisi, vol.21, pp.564-571, 2017 (Refereed Journals of Other Institutions)
- V. **4 Metoksimetil 1 6 Dimetil 2 Okso 1 2 Dihidropiridin 3 Karbonitril Molekülünün Teorik Olarak İncelenmesi**
GÜMÜŞ H., TAMER Ö., AVCI D., ATALAY Y.
SAÜ Fen Bilimleri Enstitüsü Dergisi, vol.19, pp.303-311, 2015 (Refereed Journals of Other Institutions)
- VI. **A THEORETICAL STUDY ON 5 CHLORO 8 HYDROXYQUINOLINIUM NITRATE**
GÜMÜŞ H., ATALAY Y., GÜNAY N., AVCI D., BAŞOĞLU A.
BALKAN PHYSICS LETTERS, vol.19, pp.350-361, 2011 (Refereed Journals of Other Institutions)
- VII. **A THEORETICAL STUDY ON 5 4 CHLOROPHENYL 1H TETRAZOLE**
GÜMÜŞ H., GÜNAY N., ESMER K., TARCAN E., ATALAY Y.

BALKAN PHYSICS LETTERS, vol.19, pp.341-349, 2011 (Refereed Journals of Other Institutions)

VIII. **L ASPARAGİNYUM PİKRAAT MOLEKÜLÜNÜN SPEKTROSKOPİK ÖZELLİKLERİNİN TEORİK OLARAK İNCELENMESİ**

GÜNAY N., GÜMÜŞ H., ATALAY Y.

SAU Fen Edebiyat Dergisi, 2011 (Other Refereed National Journals)

Books & Book Chapters

I. **SPECTRAL AND MOLECULAR STRUCTURE STUDIES OF 2-(2-(3-NITROPHENYL)HYDRAZONO)-5,5-DIMETHYL CYCLOHEXANE-1,3-DIONE MOLECULE**

Gümüş H.

in: fen bilimleri ve matematikte akademik arařtırmalar, prof. dr. zeki yıldırım, Editor, gece kitapevi, Ankara, pp.71-90, 2018

Refereed Congress / Symposium Publications in Proceedings

I. **2-(2-hidroksi-5-metoksi-3-nitrobenziliden)-N-metilhidrazin-1-karbotioamidmolekülünün kuantum kimyasal hesaplamalar ile yapılan teorik hesaplamaları**

GÜMÜŞ H.

International Conferance on Data science and Aplications, 4 - 07 October 2018

II. **6-Amino-3-Metil-4-Piridin-4-il-2,4-Dihydropyrano (2,3-c) Pirazol5-KarbonitrilMolekülünün Moleküler Yapı Çalışmaları**

GÜMÜŞ H.

International Conferance on Data science and Aplications, 4 - 07 October 2018

III. **1,2-(tetrazol-1-yl)etan üzerine teorik bir çalışma**

GÜMÜŞ H.

multicongress adana 2018 - 2. Uluslararası Multidisipliner Çalışmaları, 4 - 05 May 2018

IV. **BTPCA MOLEKÜLÜNÜN DFT METODU KULLANILARAK YAPILAN TEORİK HESAPLAMALARI**

GÜMÜŞ H.

multicongress adana 2018 - 2. Uluslararası Multidisipliner Çalışmaları, 4 - 05 May 2018

V. **2- (2- (3-nitrofenil) hidrazono) -5,5-dimetilsikloheksan-1,3-dion molekülünün spektroskopik analizi**

GÜMÜŞ H.

IV. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALARİ SEMPOZYUMU, 27 - 28 April 2018

VI. **Molecular structure, electrical properties and molecular electrostatic potential energy calculations of [(C6H5N(et)CS2)Hg(C6H5N(butyl)CS2)] molecule**

GÜMÜŞ H.

IV. ULUSLARARASI MULTİDİSİPLİNER ÇALIŞMALARİ SEMPOZYUMU, 27 - 28 April 2018

VII. **Molecular Structure and Vibrational Spectra of L-Arginine Semi-Oxalate (LASO) by Density Functional Theory (DFT) Calculations**

GÜMÜŞ H.

Türk Fizik Derneđi 33. Uluslararası Fizik Kongresi, 6 - 10 September 2017, pp.253

VIII. **Quantum chemical calculations on the geometrical, conformational, spectroscopic and nonlinear optical parameters of 2-hydrazino-6-methyl-4-(methoxymethyl)-5-nitropyridine-3-carbonitrile**

GÜMÜŞ H.

Türk Fizik Derneđi 33. Uluslararası Fizik Kongresi, 6 - 10 September 2017, pp.259

IX. **1-[(E)-[[4-(MORFOLİN-4-YL)FENİL]İMİNO}METİL]NAPHTHALEN-2-OL (MPIMN) MOLEKÜLÜNÜN YAPISAL, SPEKTROSKOPİK, ELEKTRONİK VE LİNEER OLMAYAN OPTİK ÖZELLİKLERİNİN TEORİK OLARAK İNCELENMESİ**

GÜMÜŞ H.

- XV. ULUSAL SPEKTROSKOPİ KONGRESİ, Turkey, 17 - 19 May 2017
- X. **NİKOTİNAMİD İÇEREN ÇİNKO (II) KOMPLEKSİNİN (C₆H₁₁N₂)[ZnBr₃(C₆H₆N₂O)] (1a) YAPISAL, SPEKTROSKOPİK VE ELEKTRONİK ÖZELLİKLERİ ÜZERİNE TEORİK BİR ÇALIŞMA**
GÜMÜŞ H.
XV. ULUSAL SPEKTROSKOPİ KONGRESİ, Yalova, Turkey, 17 - 19 May 2017
- XI. **DENSITY FUNCTIONAL THEORY CALCULATIONS ON CONFORMATIONAL SPECTROSCOPIC AND ELECTRICAL PROPERTIES OF DMPP MOLECULE**
GÜMÜŞ H.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, 6 - 09 September 2016
- XII. **THEORETICAL INVESTIGATION OF MPABA MOLECULE BY DFT CALCULATIONS**
GÜMÜŞ H.
Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, 6 - 09 September 2016
- XIII. **Theoretical Investigation of Bis Thiourea Zinc Acetate Btza IR and Raman Spectra Conformational Nbo and Nlo Analysis**
GÜMÜŞ H., GÜNAY N., TARCAN E., ATALAY Y.
29. Uluslararası Fizik Kongresi, 5 - 08 September 2012, pp.81
- XIV. **A Theoretical Study on 6 3 3 4 4 Pentafluoro 2 Hidroksi 1 Butenyl 2 4 Pyrimidinedione**
GÜMÜŞ H., GÜNAY N., TARCAN E., ATALAY Y.
29. Uluslararası Fizik Kongresi, 5 - 08 September 2012, pp.431
- XV. **The Studies of Solvent Effect on Molecular Structure and C O Stretching Vibrations of Flurbiprofen**
GÜNEŞDOĞDU SAĞDINÇ S., GÜMÜŞ H., TEKİN N.
28. Uluslararası Fizik Kongresi, 6 - 09 September 2011, pp.473
- XVI. **A quantum chemical studies on the Bisthiourea Zinc Chloride BTZC**
GÜMÜŞ H., GÜNAY N., AVCI D., ATALAY Y.
XII. Ulusal Spektroskopi Kongresi, Turkey, 18 May 2011, pp.18-22
- XVII. **A Theoretical Study on Quinoline 2 Carboxylic Acid Quinolinium 2 Carboxylate**
GÜMÜŞ H., GÜNAY N., TARCAN E., ATALAY Y.
9. Uluslararası Kimyasal Fizik Kongresi, 14 - 16 October 2010, pp.107
- XVIII. **A Theoretical Study on 5 Chloro 8 Hydroxyquinolinium Nitrate**
GÜMÜŞ H., GÜNAY N., AVCI D., BAŞOĞLU A.
27. Uluslararası Fizik Kongresi, 14 - 17 September 2010, pp.487
- XIX. **A Theoretical Study on 5 4 Chlorophenyl 1H Tetrazole**
GÜMÜŞ H., GÜNAY N., ESMER K., TARCAN E., ATALAY Y.
27. Uluslararası Fizik Kongresi, 14 - 17 September 2010, pp.486
- XX. **Flurbiprofen Molekülünün Cu II ve Hg II Komplekslerinin Yapısının Deneysel ve Teorik İncelenmesi**
GÜMÜŞ H., GÜNEŞDOĞDU SAĞDINÇ S.
25. Uluslararası Fizik Kongresi, 25 - 29 August 2008, pp.71
- XXI. **Flurbiprofen Molekülünün Titreşim Spektrumları ve Moleküler Yapısının İncelenmesi**
GÜMÜŞ H., GÜNEŞDOĞDU SAĞDINÇ S.
X. Ulusal Spektroskopi Kongresi, Turkey, 04 July 2007, pp.77

Edit Congress and Symposium Activities

- international conference on data science and applications, Working Group, Yalova, Turkey, 2018
2. uluslararası multidisipliner çalışmaları kongresi, Working Group, Adana, Turkey, 2018
- IV. International Symposium on Multidisciplinary Studies (ISMS) , Working Group, Paris, France, 2018
- Türk Fizik Derneği 33. Uluslararası Fizik Kongresi, Working Group, Muğla, Turkey, 2017
- XV. ULUSAL SPEKTROSKOPİ KONGRESİ, Working Group, Yalova, Turkey, 2017
- Türk Fizik Derneği 32. Uluslararası Fizik Kongresi, Working Group, Muğla, Turkey, 2016
29. Uluslararası Fizik Kongresi, Working Group, Muğla, Turkey, 2012

28. Uluslararası Fizik Kongresi, Working Group, Muğla, Turkey, 2011
XII. Ulusal Spektroskopi Kongresi, Working Group, Antalya, Turkey, 2011
9. Uluslararası Kimyasal Fizik Kongresi, Working Group, İzmir, Turkey, 2010
27. Uluslararası Fizik Kongresi, Working Group, Muğla, Turkey, 2010
25. Uluslararası Fizik Kongresi, Working Group, Muğla, Turkey, 2008
X. Ulusal Spektroskopi Kongresi, Working Group, İzmir, Turkey, 2007

Citations

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