

## Asst. Prof. Bilge BIÇAK

### Personal Information

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### International Researcher IDs

ScholarID: b5LH\_ZcAAAAJ

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### Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Atom Ve Molekül Fiziği Anabilim Dalı, Turkey  
2015 - 2021

Postgraduate, Istanbul University, Institute of Graduate Studies In Sciences, Atom Ve Molekül Fiziği Anabilim Dalı, Turkey  
2012 - 2014

Undergraduate, Istanbul University, Faculty Of Science, Fizik Bölümü, Pedagojik Formasyon, Turkey 2009 - 2012

Undergraduate, Istanbul University, Faculty Of Science, Department Of Physics, Turkey 2008 - 2012

### Certificates, Courses and Trainings

Vocational Training, NANOPARTİKÜL KARAKTERİZASYON METOTLARI, Lab Akademi , 2020

IT, Python Eğitimi, İstanbul İşletme Enstitüsü, 2020

IT, Temel Programlamaya Giriş Eğitimi, İstanbul İşletme Enstitüsü, 2020

Education Management and Planning, COMPUTER AIDED DRUG DESIGN, SANKO UNIVERSITY, 2017

Education Management and Planning, QUANTUM MATTER AT ULTRALOW TEMPERATURES, INTERNATIONAL SCHOOL OF PHYSICS "ENRICO FERMI", 2014

Education Management and Planning, 7. Uluslararası Katılımlı Parçacık Hızlandırıcıları ve Dedektörleri Yaz Okulu, Türk Fizik Derneği, 2011

### Dissertations

Doctorate, DEVELOPMENT of THERAPEUTIC PEPTIDE-LOADED POLYMERIC NANO DRUG FORMULATIONS and INVESTIGATION of THEIR STRUCTURES with MOLECULAR MODELING STUDIES, Istanbul University, Faculty Of Science, Department Of Physics, 2021

Postgraduate, MET-SER DİPEPTİDİNİN TİTREŞİM FREKANS VE KİPLERİNİN KONFORMASYON ANALİZİ VE AB-INITIO DFT YÖNTEMLERİ İLE İNCELENMESİ, Istanbul University, Faculty Of Science, Department Of Physics, 2014

### Research Areas

Physics, Atomic and Molecular Physics, Theory of Atoms and Molecules, Atomic and Molecular Interactions, Natural Sciences

## Academic Titles / Tasks

Assistant Professor, Istanbul University, Faculty of Science, Department of Physics, 2023 - Continues

Research Assistant PhD, Istanbul University, Faculty of Science, Department of Physics, 2021 - 2023

Research Assistant, Istanbul University, Faculty of Science, Department of Physics, 2018 - 2021

Researcher, Freie Universitaet Berlin, Fachbereich Physik, Institut Für Theoretische Physik, 2019 - 2019

## Academic and Administrative Experience

Assistant Director of the Institute, Istanbul University, Institute Of Graduate Studies In Sciences, 2024 - Continues

Institute Board Member, Istanbul University, Institute Of Graduate Studies In Sciences, 2024 - Continues

## Courses

THERMODYNAMICS AND STATISTICAL MECHANICS I, Undergraduate, 2022 - 2023

İleri Fizik Uygulamaları-II, Undergraduate, 2022 - 2023

COMPUTER PROGRAMMING I, Undergraduate, 2022 - 2023

Atom ve Molekül Fiziği Lab, Undergraduate, 2021 - 2022, 2019 - 2020

Optics Lab, Undergraduate, 2021 - 2022

Physics Lab-I-Mechanics, Undergraduate, 2021 - 2022

Fizil Lab-II, Undergraduate, 2022 - 2023

Fizik Lab-I Mekanik, Undergraduate, 2021 - 2022

Titreşim ve Dalgalar (TEBİP), Undergraduate, 2021 - 2022, 2019 - 2020

Elektrik ve Manyetizma Laboratuvarı (YÖK TEBİP Üstün Başarı Sınıfları), Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Physics-II (uygulama), Undergraduate, 2020 - 2021

Physics-I (Uyg), Undergraduate, 2021 - 2022

Fizik Laboratuvarı-III, Undergraduate, 2020 - 2021

Physics-II (Uyg) (Matematik Bölümü), Undergraduate, 2019 - 2020

Calculus-III (Uyg), Undergraduate, 2020 - 2021, 2019 - 2020

Mekanik Laboratuvarı (YÖK TEBİP Üstün Başarı Sınıfları-Fizik Bölümü), Undergraduate, 2019 - 2020, 2017 - 2018

Atom ve Molekül Fiziği Lab (TEBİP), Undergraduate, 2019 - 2020

Ord. and Par. Dif. Equ. (Uyg), Undergraduate, 2020 - 2021, 2019 - 2020

Mekanik Laboratuvarı (YÖK TEBİP Üstün Başarı Sınıfları-Biyoloji ve Kimya Bölümleri Grubu), Undergraduate, 2019 - 2020, 2017 - 2018

Physics-I (Uyg) (Matematik Bölümü), Undergraduate, 2019 - 2020

Fizik III (Astronomi Yeni Müfredat) Uygulama, Undergraduate, 2018 - 2019

Atom ve Molekül Fiziği I (Uygulama), Undergraduate, 2017 - 2018

Temel Bilgi Teknolojileri (Uygulama), Undergraduate, 2017 - 2018

Fizik III (Astronomi Eski Müfredat) Uygulama, Undergraduate, 2018 - 2019

## Published journal articles indexed by SCI, SSCI, and AHCI

1. **Phytochemical profiling, in vitro biological activities, and in silico (molecular docking and absorption, distribution, metabolism, excretion, toxicity) studies of *Polygonum cognatum***

## Meissn

Akpınar R., YILDIRIM BAŞTEMUR G., BIÇAK B., ŞANLI N. Ö., MERTOĞLU KAMALI E., PEKMEZ M., KECEL GÜNDÜZ S., Percin oezkorucuklu S.

JOURNAL OF SEPARATION SCIENCE, vol.47, 2024 (SCI-Expanded)

- II. **New Coumarin Derivative with Potential Antioxidant Activity: Synthesis, DNA Binding and In Silico Studies (Docking, MD, ADMET)**  
Kecel Gündüz S., Kılınç Y., Bıçak B., Gok B., Belmen B., Aydoğan F., Yolaçan Ç.  
ARABIAN JOURNAL OF CHEMISTRY, vol.16, pp.1, 2023 (SCI-Expanded)
- III. **Structural, spectroscopic, molecular docking, ADME, molecular dynamics studies of Val-Trp dipeptide**  
Bıçak B.  
JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, vol.41, pp.1-18, 2023 (SCI-Expanded)
- IV. **Microplastic Accumulation in Crayfish *Astacus leptodactylus* (Eschscholtz 1823) and Sediments of Durusu (Terkos) Lake (Turkey)**  
MÜLAYİM A., Bat L., Oztekin A., KECEL GÜNDÜZ S., Yucedag E., BIÇAK B.  
WATER AIR AND SOIL POLLUTION, vol.233, no.11, 2022 (SCI-Expanded)
- V. **Molecular docking studies of YKT tripeptide and drug delivery system with poly(epsilon-caprolactone) nanoparticles**  
Bicak B., Kecel-Gunduz S., Budama-Kilinc Y., Ozdemir B.  
ARCHIV DER PHARMAZIE, vol.355, 2022 (SCI-Expanded)
- VI. **STRUCTURAL, SPECTROSCOPIC, IN SILICO, IN VITRO AND DNA BINDING EVALUATIONS OF TYROSYL-LYSYL-THREONINE**  
Bıçak B., Kecel Gündüz S., Kılınç Y., Imhof P., Gök B., Akman G., Özel A.  
Journal Of Biomolecular Structure & Dynamics, vol.1, no.1, pp.1, 2021 (SCI-Expanded)
- VII. **Structural Characterization and Drug Delivery System of Natural Growth-Modulating Peptide against Glioblastoma Cancer**  
Kılınç Y., Kecel Gündüz S., Çakır Koç R., Aslan B., Bıçak B., Kökcü Y., Özel A., Akyüz S.  
International Journal Of Peptide Research And Therapeutics, vol.1, no.1, pp.1-45, 2021 (SCI-Expanded)
- VIII. **Computer-Aided Anticancer Drug Design: In vitro and In silico Studies of New Iminocoumarin Derivative**  
Kecel Gündüz S., Kılınç Y., Gok B., Bıçak B., Akman G., Arvas B., Aydoğan F., Yolaçan Ç.  
JOURNAL OF MOLECULAR STRUCTURE, no.1, pp.1, 2021 (SCI-Expanded)
- IX. **PEPTIDE BASED NANO-DRUG CANDIDATE FOR CANCER TREATMENT: PREPARATION, CHARACTERIZATION, IN VITRO AND IN SILICO EVALUATION**  
Bıçak B., Kılınç Y., Kecel Gündüz S., Zorlu T., Akman G.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1240, pp.130573, 2021 (SCI-Expanded)
- X. **New nanodrug design for cancer therapy: Its synthesis, formulation, in vitro and in silico evaluations**  
KILINÇ Y., Kecel-Gunduz S., Ozdemir B., BIÇAK B., AKMAN G., ARVAS B., AYDOĞAN F., YOLAÇAN Ç.  
ARCHIV DER PHARMAZIE, vol.353, no.11, 2020 (SCI-Expanded)
- XI. **In Silico design of AVP (4–5) peptide and synthesis, characterization and in vitro activity of chitosan nanoparticles**  
Kecel-Gunduz S., Budama-Kilinc Y., Çakır Koç R., Zorlu T., Bicak B., Kokcu Y., Ozel A., Akyüz S.  
DARU, Journal of Pharmaceutical Sciences, vol.28, pp.139-157, 2020 (SCI-Expanded)
- XII. **Structural analysis, molecular dynamics and docking calculations of skin protective tripeptide and design, characterization, cytotoxicity studies of its PLGA nanoparticles**  
Kokcu Y., Kecel-Gunduz S., Budama-Kilinc Y., Cakir-Koc R., Bicak B., Zorlu T., Ozel A., Akyuz S.  
Journal of Molecular Structure, vol.1200, 2020 (SCI-Expanded)
- XIII. **In silico Analysis of Sulpiride, Synthesis, Characterization and In vitro Studies of its Nanoparticle for the Treatment of Schizophrenia**  
Kecel-Gunduz S., Budama-Kilinc Y., Cakir-Koc R., Zorlu T., Bıçak B., Kokcu Y., Kaya Z., Özel A., Akyuz S.

- CURRENT COMPUTER-AIDED DRUG DESIGN, vol.16, no.2, pp.104-121, 2020 (SCI-Expanded)
- XIV. **Papain Loaded Poly(epsilon-Caprolactone) Nanoparticles: In-silico and In-Vitro Studies**  
Budama-Kilinc Y., Cakir-Koc R., Kecel-Gunduz S., Zorlu T., Kokcu Y., Bicak B., Karavelioglu Z., Ozel A. E.  
JOURNAL OF FLUORESCENCE, vol.28, pp.1127-1142, 2018 (SCI-Expanded)
- XV. **Computational design of Phe-Tyr dipeptide and preparation, characterization, cytotoxicity studies of Phe-Tyr dipeptide loaded PLGA nanoparticles for the treatment of hypertension**  
Kecel-Gunduz S., Budama-Kilinc Y., Koc R. C., Kokcu Y., Bicak B., Aslan B., Ozel A.  
Journal of Biomolecular Structure and Dynamics, vol.36, pp.2893-2907, 2018 (SCI-Expanded)
- XVI. **Novel NAC-loaded poly(lactide-coglycolide acid) nanoparticles for cataract treatment: Preparation, characterization, evaluation of structure, cytotoxicity, and molecular docking studies**  
Budama-Kilinc Y., Cakir-Koc R., Kecel-Gunduz S., Kokcu Y., Bicak B., Mutlu H., E O.  
PeerJ, vol.2018, 2018 (SCI-Expanded)
- XVII. **Structural and spectroscopic investigation on antioxidant dipeptide, L-Methionyl-L-Serine: A combined experimental and DFT study**  
Kecel-Gunduz S., Bicak B., Celik S., Akyuz S., Ozel A.  
Journal of Molecular Structure, vol.1137, pp.756-770, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A Study of The Anticancer Effect of 1,8 Cineole: Molecular Docking Analysis**  
Bıçak B.  
Bilge International Journal of Science and Technology Research, vol.8, no.1, pp.50-55, 2024 (Peer-Reviewed Journal)
- II. **A Theoretical Study: DNA Binding and ADMET Profile of Some Hydroxycinnamic Acids**  
Bıçak B., Kecel Gündüz S.  
Physics and Astronomy Reports, vol.1, no.2, pp.74-84, 2023 (Peer-Reviewed Journal)
- III. **INTERACTION OF GHK TRIPEPTIDE WITH RECEPTORS TARGETED IN SOME CANCER STUDIES: A THEORETICAL APPROACH WITH MOLECULAR DOCKING**  
Bıçak B., Kecel Gündüz S.  
Hittite Journal of Science and Engineering, vol.10, no.3, pp.1, 2023 (Peer-Reviewed Journal)
- IV. **INVESTIGATION OF THE EFFICACY OF H-PHE-TYR-OH DIPEPTIDE IN THE TREATMENT OF HYPERTENSION USING IN SILICO METHODS**  
Bıçak B., Kecel Gündüz S.  
CUMHURİYET SCIENCE JOURNAL, no.4, pp.1-12, 2022 (Peer-Reviewed Journal)
- V. **Conformational Analysis of Tyrosyl-Lysyl-Threonine Tripeptide Using MM, MD and QM Methods and Its Hyperpolarizability Study**  
Bıçak B., Kecel Gündüz S.  
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.26, no.4, pp.745-756, 2022 (Peer-Reviewed Journal)
- VI. **IN SILICO ANALYSIS FOR CHARACTERIZING THE STRUCTURE AND BINDING PROPERTIES OF ALA-HIS-LYS (AHK) TRIPEPTIDE**  
Kecel Gündüz S., Koç E., Bıçak B., Kökcü Y., Özel A., Akyüz S.  
The Online Journal of Science and Technology, vol.10, no.3, pp.111-120, 2020 (Peer-Reviewed Journal)
- VII. **The Interaction of Ile-Phe Dipeptide with Phosphatidylinositide 3-Kinase (PI3K): Molecular Dynamics and Molecular Docking Studies**  
Bıçak B., Kokcu Y., Kecel Gündüz S., Özel A., Akyüz S.  
Natural and Engineering Sciences (NESciences), no.1, pp.1, 2020 (Peer-Reviewed Journal)
- VIII. **Molecular Docking and Molecular Dynamics Studies of L-Glycyl-L-Glutamic Acid Dipeptide**  
Bıçak B., Kecel Gündüz S., Kokcu Y., Özel A., Akyüz S.  
Bilge International Journal of Science and Technology Research, vol.3, no.1, pp.1-9, 2019 (Peer-Reviewed Journal)
- IX. **COMPUTERISED DESIGNING OF DOXORUBICIN WITH BREAST CANCER CELLS**

Sener L., Gunduz S., Şener A., Bicak B., Kokcu Y., Ozel A., Albeniz I.

JOURNAL OF ISTANBUL FACULTY OF MEDICINE-ISTANBUL TIP FAKULTESİ DERGİSİ, vol.82, no.1, pp.40-46, 2019 (ESCI)

X. **Use of the Comet Assay and Molecular Docking Techniques to Evaluate the Effect of Nicotine in Human Breast Cancer Cell Line**

TÜRKER ŞENER L., KECEL GÜNDÜZ S., Şener A., Çelikok Y., BIÇAK B., KÖKCÜ Y., ÖZEL A., ALBENİZ I.

International Journal of Scientific and Technological Research, vol.4, no.10, pp.1-15, 2018 (Scopus)

## Books & Book Chapters

I. **An Overview Of The Economic Potential Of Medicinal Plants**

Bıçak B., Kecel Gündüz S.

in: Medicinal and Aromatic Plants, Mine Koçyiğit, Yusuf Kenan Haspolat, Editor, Orient Publications, Ankara, pp.9-18, 2023

II. **An Overview Of The Genus Rosa With Molecular Modeling Studies**

Bıçak B., Kecel Gündüz S.

in: Rosa, mine koçyiğit, yağmur emre arıcan, yusuf kenan haspolat, Editor, Orient Publications, Ankara, pp.48-56, 2023

III. **Importance Of Medicinal And Aromatic Plants In Drug Discovery And Development**

Kecel Gündüz S., Bıçak B.

in: Medicinal and Aromatic Plants, Mine koçyiğit, Yusuf Kenan Haspolat, Editor, Orient Publications, Ankara, pp.1-8, 2023

IV. **Nanoparticles and Plant-Microbe Interactions: Current Status and Overview**

Bıçak B., Kecel Gündüz S., Çekiç F. Ö., Gören Sağlam N.

in: Nanoparticles and plant-microbe interactions: An environmental perspective, Seena .Sahadeva, Editor, Elsevier Science, Oxford/Amsterdam , Amsterdam, pp.1-36, 2022

V. **Computer-Aided Drug Design of Plant-Based Compounds**

Bıçak B., Kecel Gündüz S.

in: Isolation, Characterization, and Therapeutic Applications of Natural Bioactive Compounds, Ajeet Singh, Editor, IGI Global, Pennsylvania, pp.320-345, 2022

VI. **A Contribution of Spectrophotometric Methods to Medicinal Plant Taxonomy**

Koçyiğit Avcı M., Geçimli F., Bıçak B., Vatandaşlar Ö., Kecel Gündüz S.

in: Isolation, Characterization, and Therapeutic Applications of Natural Bioactive Compounds, Ajeet Singh, Editor, IGI Global, Pennsylvania, pp.297-319, 2022

VII. **Molecular Modeling of Nanoparticles**

Bıçak B., Gök B., Kecel Gündüz S., Kılıç Y.

in: Computer Aided Pharmaceutics and Drug Delivery, Vikas Anand Saharan, Editor, Springer, London/Berlin , New Delhi, pp.35-50, 2021

VIII. **Targeted Drug Delivery in Cancer Treatment**

Bıçak B., Kecel Gündüz S., Özel A.

in: Advancements in Cancer Therapeutics , Dr. Sumit Kumar, Dr. Saurabh Verma, Prof. Moshahid Alam Rizvi, Editor, IGI Global, Pennsylvania, pp.382-412, 2021

IX. **Computational Drug Design Methods Used in Cancer Studies**

Kecel Gündüz S., Bıçak B., Özel A.

in: Advancements in Cancer Therapeutics, Dr. Sumit Kumar, Dr. Saurabh Verma, Prof. Moshahid Alam Rizvi, Editor, IGI Global, Pennsylvania, pp.89-115, 2021

X. **Drug delivery nanosystems for neural regenerative medicine**

Kecel Gündüz S., Bıçak B., Özel A.

in: NEURAL REGENERATIVE NANOMEDICINE, Mehdi Razavi, Editor, Academic Press , Oxford, pp.89-116, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **EVALUATION OF THE ANTITUMOR EFFECT OF BETA- CARYOPHYLLENE: IN SILICO METHODS**  
Bıçak B.  
7. Uluslararası Ankara Multidisipliner Bilimsel Çalışmalar Kongresi, Ankara, Turkey, 5 - 06 March 2024, pp.1
- II. **INVESTIGATION OF THE ANTITUMOR EFFECT OF VIRIDIFLOROL WITH MOLECULAR DOCKING METHOD**  
Bıçak B.  
3.Uluslararası Çankaya Bilimsel Çalışmalar Kongresi, Ankara, Turkey, 28 - 29 February 2024, pp.1
- III. **Investigation Of The Effect Of Beta-Pinene, An Essential Oil Compound, On Lung Cancer Using In Silico Methods**  
Bıçak B.  
8. ULUSLARARASI GÖBEKLİTEPE BİLİMSEL ÇALIŞMALAR KONGRESİ, Şanlıurfa, Turkey, 2 - 03 March 2024, pp.1
- IV. **INVESTIGATION OF ANTIHYPERTENSIVE MECHANISMS OF VALYLTRYPTOPHAN DIPEPTIDE BY MOLECULAR DOCKING METHOD**  
Bıçak B.  
AVRASYA 8th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Tbilisi, Georgia, 14 - 16 July 2023, pp.1
- V. **GLY-HIS-LYS TRIPEPTİDİNİN ANJİYOTENSİN DÖNÜŞTÜRÜCÜ ENZİM İLE ETKİLEŞİMLERİNİN MOLEKÜLER KENETLENME YÖNTEMİ İLE İNCELENMESİ**  
Bıçak B., Kecel Gündüz S.  
5. ULUSAL BAŞKENT DİSİPLİNLER ARASI BİLİMSEL ÇALIŞMALAR KONGRESİ, Ankara, Turkey, 21 - 22 June 2022, pp.1
- VI. **Molecular Docking and ADME Analyses of Antihypertensive Dipeptide**  
Bıçak B., Kecel Gündüz S.  
14. International Conference on Mathematics Engineering Natural and Medical Sciences-EJONS, Paris, France, 6 - 07 July 2022, pp.1
- VII. **IN SILICO ANALYSIS OF HAIR GROWTH PEPTIDE**  
Kecel Gündüz S., Koç E., Bıçak B., Özel A., Akyüz S.  
Türk Fizik Derneği 35. Uluslararası Fizik Kongresi, Muğla, Turkey, 4 - 08 September 2019, pp.162
- VIII. **MOLECULAR DOCKING STUDIES OF PHENYTOIN, MEPHENYTOIN, AND ETHOTOIN WITH CYTOCHROME P450 3A4**  
Kandemir M. C., Saları A., BIÇAK B., KECEL GÜNDÜZ S.  
Türk Fizik Derneği 35. Uluslararası Fizik Kongresi, Muğla, Turkey, 4 - 08 September 2019, pp.331
- IX. **DNA INTERACTION OF SOME HYDANTOIN-BASED DRUGS WITH MOLECULAR DOCKING CALCULATIONS**  
Kandemir M. C., Saları A., BIÇAK B., KECEL GÜNDÜZ S.  
Türk Fizik Derneği 35. Uluslararası Fizik Kongresi, Muğla, Turkey, 4 - 08 September 2019, pp.158
- X. **MOLECULAR DOCKING INVESTIGATION OF PIXANTRONE WITH B-DNA DODECAMER**  
Saları A., Kandemir M. C., BIÇAK B., KECEL GÜNDÜZ S.  
Türk Fizik Derneği 35. Uluslararası Fizik Kongresi, Muğla, Turkey, 4 - 08 September 2019, pp.331
- XI. **MOLECULAR DOCKING CALCULATIONS OF PIXANTRONE WITH TOPOISOMERASE II**  
Saları A., Kandemir M. C., BIÇAK B., KECEL GÜNDÜZ S.  
Türk Fizik Derneği 35. Uluslararası Fizik Kongresi, Muğla, Turkey, 4 - 08 September 2019, pp.166
- XII. **THEORETICAL CONFORMATIONAL ANALYSIS OF L-ISOLEUCYL-L-PHENYLALANINE DIPEPTIDE**  
BIÇAK B., KECEL GÜNDÜZ S., ÖZEL A.  
1st International Symposium on Graduate Research in Science, İstanbul, Turkey, 4 - 06 October 2018, pp.9
- XIII. **MOLECULAR DYNAMIC AND DOCKING STUDIES OF RGD PEPTIDE**  
BIÇAK B., KÖKCÜ Y., KECEL GÜNDÜZ S., ÖZEL A.  
Turkish Physical Society 33 th International Physics Congress, Muğla, Turkey, 6 - 09 September 2017, pp.1
- XIV. **STRUCTURAL ANALYSIS OF SDKGATLTIKKEAFPAESKS PEPTIDE**  
BIÇAK B., KÖKCÜ Y., KECEL GÜNDÜZ S., ÖZEL A.

- Turkish Physical Society 33 th International Physics Congress, Muğla, Turkey, 6 - 09 September 2017, pp.1
- XV. **COMPUTATIONAL DESIGN OF IMMUNOGENIC PEPTIDE**  
KECEL GÜNDÜZ S., KÖKCÜ Y., BIÇAK B., ÖZEL A.  
Turkish Physical Society 33 th International Physics Congress, Muğla, Turkey, 6 - 09 September 2017, pp.1
- XVI. **MOLECULAR MODELING OF FAGAAGSAKSAAGTASHVSI PEPTIDE**  
KÖKCÜ Y., BIÇAK B., KECEL GÜNDÜZ S., ÖZEL A.  
Turkish Physical Society 33 th International Physics Congress, Muğla, Turkey, 6 - 09 September 2017, pp.1
- XVII. **DETERMINATION OF CONFORMATIONAL AND STRUCTURAL FEATURES OF L-GLY-L-GLU DIPEPTIDE**  
BIÇAK B., KECEL GÜNDÜZ S., ÖZEL A.  
32nd International Physics Congress, Muğla, Turkey, 6 - 09 September 2016, pp.1
- XVIII. **VIBRATIONAL SPECTROSCOPIC INVESTIGATION OF PROLINE-TYROSINE DIPEPTIDE**  
BIÇAK B., KECEL GÜNDÜZ S.  
10th International Student Conference Of The Balkan Physical Union, İstanbul, Turkey, 3 - 05 September 2013, pp.18
- XIX. **Vibrational Spectroscopic Studies Of Analgesic Peptide**  
BIÇAK B., KECEL GÜNDÜZ S.  
Turkish Physical Society 30 th International Physics Congress, İstanbul, Turkey, 2 - 05 September 2013, pp.1

## Supported Projects

Biçak B., Kecel Gündüz S., Perçin Özkorucuklu S., Kızılkaya B., Project Supported by Higher Education Institutions, İstanbul Silivri bölgesinde yetiştirilen lavanta türlerine ait uçucu yağların yapısal ve antioksidan özelliklerinin spektroskopik ve in silico yöntemlerle belirlenmesi, 2023 - 2025

KECEL GÜNDÜZ S., BIÇAK B., ÖZEL A., Project Supported by Higher Education Institutions, Structural analysis molecular dynamics and docking calculations of skin protective tripeptide and design characterization cytotoxicity studies of its PLGA nanoparticles, 2019 - 2022

BIÇAK B., BUDAMA KILINÇ Y., Project Supported by Higher Education Institutions, Terapötik Peptid Yüklü Polimerik Nano İlaç Formülasyonlarının Geliştirilmesi ve Moleküler Modelleme Çalışmaları ile İncelenmesi, 2018 - 2021

ÖZEL A., KECEL GÜNDÜZ S., BIÇAK B., KÖKCÜ Y., Project Supported by Higher Education Institutions, Papain Loaded Polycaprolactone Nanoparticles Insilico and Invitro Studies, 2018 - 2019

KECEL GÜNDÜZ S., BIÇAK B., ÖZEL A., Project Supported by Higher Education Institutions, Computational design of PheTyr dipeptide and preparation characterization cytotoxicity studies of PheTyr dipeptide loaded PLGA nanoparticles for the treatment of hypertension, 2018 - 2019

KECEL GÜNDÜZ S., BIÇAK B., Project Supported by Higher Education Institutions, Novel NAC loaded poly lactideglycolide acid nanoparticles for cataract treatment preparation characterization evaluation of structure cytotoxicity and molecular docking studies, 2018 - 2019

KECEL GÜNDÜZ S., ÖZEL A., AKYÜZ S., BIÇAK B., ÇELİK S., Project Supported by Higher Education Institutions, Conformational behavior structural and vibrational characterization of the carboxy terminal dipeptide of b-endorphin, 2018 - 2019

KECEL GÜNDÜZ S., BIÇAK B., Project Supported by Higher Education Institutions, MET-SER Dipeptidinin Titreşim Frekans ve Kiplerinin Konformasyon Analizi ve Ab-Initio DFT Yöntemleri ile İncelenmesi, 2014 - 2015

## Patent

Gündüz U., Biçak B., Kecel Gündüz S., Çok Fonksiyonlu Etkinlik ve Toplantı İzleme, Dinleme, Kayıt, Eğitim ve Sanal Etkileşim Gözlüğü, Utility Model, CHAPTER A Human Needs, The Invention Registration Number: TR 2018 21325 A2 , Standard Registration, 2018, 2022

## Student Project

R & D Project, Antihipertansif Ile-Tyr dipeptidinin in silico ve spektroskopik çalışmaları, Istanbul University, Faculty Of Science, Department Of Physics, Turkey, 2023 - 2024

R & D Project, Raynaud Sendromunda kullanılan nifedipin molekülünün moleküler modelleme ve spektroskopik çalışmaları, Istanbul University, Faculty Of Science, Department Of Physics, Turkey, 2023 - 2024

## Memberships / Tasks in Scientific Organizations

Türk Fizik Derneği, Member, 2018 - Continues, Turkey

## Scientific Refereeing

Kahramanmaraş Sütçü İmam Üniversitesi Tarım ve Doğa Dergisi, Journal Indexed in ESCI, June 2024

EUROPEAN JOURNAL OF MEDICINAL CHEMISTRY, Journal Indexed in SCI-E, December 2023

JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, Journal Indexed in SCI-E, August 2023

Genel Tıp Dergisi, National Scientific Refreed Journal, June 2023

COMBINATORIAL CHEMISTRY AND HIGH THROUGHPUT SCREENING, Journal Indexed in SCI-E, May 2023

JOURNAL OF CLINICAL PHARMACY AND THERAPEUTICS, Journal Indexed in SCI-E, May 2023

ANKARA UNIVERSİTESİ ECZACILIK FAKULTESİ DERGİSİ, Other Indexed Journal, May 2023

JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, Journal Indexed in SCI-E, October 2022

JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, SCI Journal, September 2022

Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, September 2022

JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, Journal Indexed in SCI-E, July 2022

European Journal of Biology, Other Indexed Journal, June 2022

International Journal of Pure and Applied Sciences, Other Indexed Journal, May 2022

International Journal of Secondary Metabolite, Other Indexed Journal, April 2022

JOURNAL OF BIOMOLECULAR STRUCTURE AND DYNAMICS, Journal Indexed in SCI-E, December 2021

International Journal of Secondary Metabolite, Other Indexed Journal, December 2021

BMC CHEMISTRY, Journal Indexed in SCI-E, October 2021

IGI Global, Chapter Scientific / Professional Book Published by Renowned Publishing Houses, April 2020

IGI Global, Chapter Scientific / Professional Book Published by Renowned Publishing Houses, April 2020

## Metrics

Publication: 56

Citation (WoS): 98

Citation (Scopus): 113

H-Index (WoS): 6

H-Index (Scopus): 7

## Congress and Symposium Activities

EJONS 14th INTERNATIONAL CONFERENCE ON MATHEMATICS, ENGINEERING, NATURAL & MEDICAL SCIENCES, Attendee, Paris, France, 2022

5. ULUSAL BAŞKENT DİSİPLİNLER ARASI BİLİMSEL ÇALIŞMALAR KONGRESİ, Attendee, Ankara, Turkey, 2022

35. Uluslararası Fizik Kongresi, Attendee, İstanbul, Turkey, 2019

Elsevier Yazar Çalıştayı, Attendee, İstanbul, Turkey, 2018



International Symposium on Graduate Research in Science Focus on Entrepreneurship and Innovation (ISGRS 2018), Attendee, İstanbul, Turkey, 2018  
BİYOTEKNOLOJİK İLAÇLARDA GELECEK VE TÜRKİYE SEMPOZYUMU, Attendee, İstanbul, Turkey, 2018  
ELSEVIER PATHWAY STUDIO ÇALIŞTAYI, Attendee, İstanbul, Turkey, 2018  
33. TFD ULUSLARARASI FİZİK KONGRESİ, Attendee, Muğla, Turkey, 2017  
Innovation in Medicine Summit-3, Attendee, Gaziantep, Turkey, 2017  
32. TFD ULUSLARARASI FİZİK KONGRESİ, Attendee, Muğla, Turkey, 2016  
İ.Ü. 4. FİZİK ÇALIŞTAYI, Attendee, Turkey, 2014  
10.INTERNATIONAL STUDENT CONFERENCE OF THE BALKAN PHYSICAL UNION, Attendee, İstanbul, Turkey, 2013  
30. TFD ULUSLARARASI FİZİK KONGRESİ, Attendee, Turkey, 2013  
İ.Ü. 3. FİZİK ÇALIŞTAYI, Attendee, Turkey, 2013  
İ.Ü. 2. FİZİK ÇALIŞTAYI, Attendee, İstanbul, Turkey, 2012  
7. Uluslararası Katılımlı Parçacık Hızlandırıcıları ve Dedektörleri Yaz Okulu, Attendee, Muğla, Turkey, 2011  
İ.Ü. FİZİK ÇALIŞTAYI, Attendee, İstanbul, Turkey, 2011

## **Scholarships**

Araştırma Görevlileri İçin Yurt Dışı Araştırma Bursları (YUDAB), University, 2019 - 2019