

## Asst. Prof. GİZEM TATAR YILMAZ

### Personal Information

Office Phone: [+90 462 377 5307](tel:+904623775307)

Email: [gizemtatar@ktu.edu.tr](mailto:gizemtatar@ktu.edu.tr)

### Education Information

Doctorate, Gaziantep University, Institute Of Health Sciences, Turkey 2014 - 2018

Postgraduate, Kadir Has University, Institute Of Science, Department Of Bioinformatics, Turkey 2009 - 2011

### Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biostatistics and Medical Informatics, Life Sciences, Bioinformatics, Biological Modelling, Biological Databases, Molecular Biology and Genetics, Molecular Biology of Cancer, Protein Engineering, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Tıp Fakültesi, Temel Tıp, 2019 - Continues

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

- I. **Investigation of the Antimicrobial Activities of Various Antimicrobial Agents on Streptococcus Mutans Sortase A through Computer-Aided Drug Design (CADD) Approaches**  
Salmanlı M., Tatar Yılmaz G., Tüzüner T.  
Computer Methods And Programs In Biomedicine, vol.0, no.0, 2021 (Journal Indexed in SCI)
- II. **Synthesis, biological evaluation (antioxidant, antimicrobial, enzyme inhibition, and cytotoxic) and molecular docking study of hydroxy methoxy benzoin/benzil analogous.**  
Yaylı N., Kılıç G., Kahriman N., Kanbolat Ş., Bozdeveci A., Alpay Karaoğlu Ş., Aliyazıcıoğlu R., Erdinç Sellitepe H., Selin Doğan İ., Aydın A., et al.  
Bioorganic chemistry, vol.115, pp.105183, 2021 (Journal Indexed in SCI Expanded)
- III. **Synthesis of novel pancreatic lipase inhibitors: Biological investigation and in silico studies**  
Mermer A., Demirci S., TATAR G.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, 2021 (Journal Indexed in SCI)
- IV. **Investigation of potential inhibitor properties of ethanolic propolis extracts against ACE-II receptors for COVID-19 treatment by molecular docking study**  
Guler H. İ., Tatar G., Yildiz O., Belduz A. O., Kolaylı S.  
ARCHIVES OF MICROBIOLOGY, 2021 (Journal Indexed in SCI)
- V. **Evaluation of the effects of chlorhexidine and several flavonoids as antiviral purposes on SARS-CoV-2 main protease: molecular docking, molecular dynamics simulation studies.**  
Tatar G., Salmanlı M., Dogru Y., Tuzuner T.  
Journal of biomolecular structure & dynamics, pp.1-10, 2021 (Journal Indexed in SCI)
- VI. **Computational drug repurposing study of the RNA binding domain of SARS-CoV-2 nucleocapsid protein with antiviral agents**

Tatar G., Ozyurt E., Turhan K.

Biotechnology Progress, vol.37, 2021 (Journal Indexed in SCI)

- VII. **Determination of potential selective inhibitors for ROCKI and ROCKII isoforms with molecular modeling techniques: structure based docking, ADMET and molecular dynamics simulation**  
Secinti B. B. , Tatar G., Tok T. T.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, vol.37, no.9, pp.2457-2463, 2019 (Journal Indexed in SCI)
- VIII. **Structure prediction of eukaryotic elongation factor-2 kinase and identification of the binding mechanisms of its inhibitors: Homology modeling, Molecular Docking and Molecular Dynamics Simulation**  
Tatar G., Taşkın Tok T.  
Journal Of Biomolecular Structure & Dynamics, vol.1, no.1, pp.1-16, 2019 (Journal Indexed in SCI)
- IX. **Synthesis, anticancer activity and ADMET studies of N-(5-methyl-1,3,4-thiadiazol-2-yl)-4-[(3-substituted)ureido/thioureido] benzenesulfonamide derivatives**  
KARAKUŞ S., TOK F., Tuerk S., ŞALVA E., Tatar G., Taskin-Tok T., Kocyigit-Kaymakcioglu B.  
PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS, vol.193, no.8, pp.528-534, 2018 (Journal Indexed in SCI)
- X. **Clarification of Interaction Mechanism of Mouse Hepatitis Virus (MHV) N and nsp3 Protein with Homology Modeling and Protein-Protein Docking Analysis.**  
Tatar G., Tok T.  
Current computer-aided drug design, 2016 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **Synthesis of benzoyl hydrazones having 4-hydroxy-3,5-dimethoxy phenyl ring, their biological activities and molecular modeling studies on enzyme inhibition activities**  
Aktar B. S. K. , Sıcak Y., Tatar Yılmaz G., Emre E. E.  
Turkish Journal of Chemistry, vol.1, no.1, pp.1-7, 2021 (Other Refereed National Journals)
- II. **Target-Driven Design of a Coumarinyl Chalcone Scaffold Based Novel EF2 Kinase Inhibitor Suppresses Breast Cancer Growth In Vivo**  
Onder F. C. , Kahraman N., Atici E. B. , Cagır A., Kandemir H., Tatar G., Tok T. T. , Kara G., Karlıga B., Durdagi S., et al.  
ACS PHARMACOLOGY & TRANSLATIONAL SCIENCE, vol.4, no.2, pp.926-940, 2021 (Journal Indexed in ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Evaluation Of Two Different Antibacterial Agents For Inhibition Of Streptococcus Mutans-Sortase A Enzyme Structure By Molecular Docking Method**  
SALMANLI M., TATAR G., TÜZÜNER T., YILMAZ N., BAYGIN Ö.  
26.International Congress of Turkish Society of Pediatric Dentistry, 10 - 13 October 2019, pp.92-93
- II. **ZIKA Viruse karşı in silico İlaç Tasarımı**  
KOK M. A. , TATAR G., TAŞKIN TOK T.  
3.Uluslararası Avrasya Multidisipliner Çalışmalar Kongresi, 4 - 07 April 2019
- III. **Üç boyutlu DNA Aptamer Temelli Biyosensörler ile Endrokin bozucu kimyasalların tespit edilmesi**  
BAYIL İ., TATAR G., TASKIN TOK T.  
3.Uluslararası Avrasya Multidisipliner Çalışmalar Kongresi, Gaziantep, Turkey, 4 - 07 April 2019, pp.334-339
- IV. **Zika Virüsüne karşı in-siliko ilaç tasarımı**  
Kok M. A. , TATAR G., Taşkın Tok T.  
3.Uluslararası Avrasya Multidisipliner Çalışmalar Kongresi, Gaziantep, Turkey, 4 - 07 April 2019, pp.304-311
- V. **Recent Developments in eEF2 Kinase Inhibitors**

AY M., CÖMERT ÖNDER F., KANDEMİR H., TAŞKIN TOK T., BELLUR ATICI E., TATAR G., KARLIĞA B., ŞAHİNER N., Ozpolat B.

International Conference on PharmaScience Research and Development (Pharma RD 2019), Paris, France, 4 - 06 March 2019, pp.25-26

- VI. **Recent Developments in eEF2 Kinase Inhibitors**  
AY M., CÖMERT ÖNDER F., KANDEMİR H., TAŞKIN TOK T., BELLUR ATICI E., TATAR G., KARLIĞA B., ÇAĞIR A., ŞAHİNER N., ÖZPOLAT B.  
International Conference on PharmScienceResearch Development, Paris, France, 4 - 06 March 2019, pp.25-26
- VII. **Determination of potential selective inhibitors for ROCKI and ROCKII isoforms with molecular modeling techniques: Structure Based Docking,ADMET and Molecular Dynamics Simulation**  
TATAR G.  
Proteinlerin Yapısı ve Etkileşimleri konulu Biyofizik Yaz Okulu, 29 - 30 August 2018
- VIII. **Molecular Docking Study of Novel 1,2,3,4,-Tetrahydroisoquinoline Derivates as Anticancer Agents against epidermal growth factor (EGFR) receptor**  
TATAR G., TASKIN TOK T., HASSAN Y., MOHAMMED A. D.  
1. Uluslararası Kanser ve İyon Kanalları Kongresi, Şanlıurfa, Turkey, 21 - 23 September 2017, pp.132
- IX. **Molecular Docking Study of Rho-Kinase (ROCK) inhibitors**  
BAYEL SECINTI B., TATAR G., TASKIN TOK T.  
Innovation in Medicine Summit-3, Gaziantep, Turkey, 11 - 13 May 2017, pp.84
- X. **Evaluation of Docking Functions for ROCK2-Ligands Docking**  
YILDIRIM M., TATAR G., TASKIN TOK T.  
4th International BAU Drug Design Congress, Gaziantep, Turkey, 13 - 15 October 2016, pp.230
- XI. **Investigation of mutation on the molecular functions of ROCK2 (Rho-kinase2) protein with molecular modeling techniques**  
TATAR G.  
EMBO Integrative modeling of biomolecular interactions practical course, Barselona, Spain, 4 - 09 July 2016, pp.35
- XII. **Investigation of mutation on the molecular functions of ROCK2 protein with molecular modeling techniques**  
TATAR G., TAŞKIN TOK T.  
Summer school on Molecular Modeling 4, Sardinia, Italy, 6 - 10 June 2016
- XIII. **Computer-assisted Drug Design and Development**  
TASKIN TOK T., TATAR G.  
Innovation in Medicine Summit-2, Gaziantep, Turkey, 05 May 2016 - 07 May 2017, pp.79
- XIV. **Voltaj Kapılı Potasyum Kanal Proteinin Kv1 2 Homoloji Modellenmesi ve HsTx1 Toksini ile Etkileşim Mekanizmaların Docking Yöntemiyle Aydınlatılması**  
YILMAZ K., TATAR G., TAŞKIN TOK T.  
27. Ulusal Kimya Kongresi, Turkey, 23 - 28 August 2015
- XV. **Elucidation of Interaction Mechanism of Coronavirus protein with Molecular Docking**  
TATAR G., TASKIN TOK T.  
Modeling of Biomolecular Systems Interactions, Dynamics and Allostery: Bridging Experiments and Computations, İstanbul, Turkey, 10 - 14 September 2014, pp.137
- XVI. **Homology modeling of Coronavirus (CoV) structural proteins and its interaction mechanism analysis**  
TATAR G., TAŞKIN TOK T.  
2. İlaç Kimyası, Üretim, Teknoloji ve Standardizasyon Kongresi, Turkey, 21 - 23 March 2014

## Supported Projects

TATAR G., Project Supported by Other Official Institutions, Sortaz A enzimine yönelik yeni antimikrobiyal inhibitörlerin moleküler modelleme yöntemleri ile geliştirilmesi, 2020 - Continues

Tatar G., Aktar B. S. K. , TUBITAK Project, Antidiyabetik Ajan Olarak alfa-Glukozidaz ve Ppar-gama'ya Karsı Kalkon,

Pirazol, İzoksazol ve Hidrazon Gruplarına Sahip Yeni Moleküllerin Tasarımı, Moleküler Modelleme Çalışmaları ve in vitro Aktivitelerinin İncelenmesi, 2021 - 2023

Tatar G., Ünal S., Okay S., Aydın S., Erkekođlu Ü. P. , Karahan M., Özkul A., Ergünay K., İnkaya A. Ç. , Turkey Institutes of Health Administration Project, PEPTIDE-BASED VACCINE RESEARCH AND DEVELOPMENT STUDIES AGAINST COVID-19, 2020 - 2021

TUBITAK Project, Moleküler Modelleme Tabanlı Yeni Hipoksiyle İndüklenen Faktörler HIF 1 ve HIF 2 Enzim İnhibitörlerinin Geliştirilmesi Sentezi ve Sitotoksosite Araştırmaları, 2016 - 2018

## **Citations**

Total Citations (WOS):32

h-index (WOS):4

## **Scholarships**

Travel Grant, Other International Organizations, 2016 - 2016

Bursary, TUBITAK, 2015 - 2016

## **Awards**

TATAR G., Best Poster Award, Turkish Society of Pediatric Dentistry, October 2019