

Prof. Özlen GÜZEL AKDEMİR

Personal Information

Office Phone: [+90 212 455 5700](tel:+902124555700) Extension: 13440

Email: oguzel@istanbul.edu.tr

Web: <http://aves.istanbul.edu.tr/oguzel/>

International Researcher IDs

ScholarID: KjkZ0V0AAAAJ

ORCID: 0000-0003-3680-1945

Publons / Web Of Science ResearcherID: M-1068-2015

ScopusID: 14013150400

Yoksis Researcher ID: 165815

Education Information

Doctorate, Istanbul University, Faculty Of Pharmacy , Farmasötik Kimya, Turkey 2000 - 2005

Postgraduate, Istanbul University, Faculty Of Pharmacy , Farmasötik Kimya, Turkey 1997 - 2000

Undergraduate, Istanbul University, Faculty Of Pharmacy , Turkey 1993 - 1997

Foreign Languages

English, B2 Upper Intermediate

Dissertations

Doctorate, N-metilsakkarinin kükürtlü türevlerinin sentezi, yapılarının aydınlatılması ve biyolojik etkilerinin incelenmesi, Istanbul University, Faculty of Pharmacy , Farmasötik Kimya, 2005

Postgraduate, Primer amin grubu taşıyan bazı ilaç maddelerinin spektrofotometrik miktar tayini, Istanbul University, Faculty of Pharmacy , Farmasötik Kimya, 2000

Research Areas

Health Sciences, Pharmacology and Therapeutics, Professional Sciences, Pharmaceutical Chemistry

Academic Titles / Tasks

Professor, Istanbul University, Faculty of Pharmacy , Department of Professional Pharmaceutical Sciences, 2016 - Continues

Associate Professor, Istanbul University, Faculty of Pharmacy , Department of Professional Pharmaceutical Sciences, 2011 - 2016

Assistant Professor, Istanbul University, Faculty of Pharmacy , Department of Professional Pharmaceutical Sciences, 2008 - 2011

Research Assistant, Istanbul University, Faculty of Pharmacy , Department of Professional Pharmaceutical Sciences, 1997

- 2008

Academic and Administrative Experience

Fakülte Kurulu Üyesi, Istanbul University, Faculty Of Pharmacy , Department Of Professional Pharmaceutical Sciences, 2023 - Continues

Head of Department, Istanbul University, Faculty Of Pharmacy , Department Of Professional Pharmaceutical Sciences, 2022 - Continues

Courses

Organik Moleküllerde Yapı Tayini Uygulamaları, Doctorate, 2023 - 2024

Farmasötik Kimya IV, Undergraduate, 2016 - 2017, 2012 - 2013

Antikanser ve Antiviral İlaçlar, Doctorate, 2016 - 2017

Farmasötik Kimya II, Undergraduate, 2015 - 2016

Organik Kimya, Undergraduate, 2016 - 2017, 2015 - 2016, 2012 - 2013

Organik Kimyada Reaksiyon Mekanizmaları, Doctorate, 2016 - 2017

İleri Organik Kimya, Postgraduate, 2012 - 2013

Bilimsel Araştırma ve Literatür Tarama, Undergraduate, 2012 - 2013, 2011 - 2012

UV ve IR spektroskopileri ve İlaçlara uygulanması, Postgraduate, 2012 - 2013, 2011 - 2012, 2010 - 2011

Advising Theses

GÜZEL AKDEMİR Ö., 3-Fenil-5-sülfamoil-1H-indol artığı taşıyan spirothiazolidinon türevlerinin sentezi, yapı tayini ve biyolojik etkilerinin incelenmesi, Postgraduate, M.Özbek(Student), 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Novel 2-(hydrazinocarbonyl)-3-phenyl-1H-indole-5-sulfonamide based thiosemicarbazides as potent and selective inhibitors of tumor-associated human carbonic anhydrase IX and XII: Synthesis, cytotoxicity, and molecular modelling studies**
Demir Yazıcı K., Trawally M., Bua S., Öztürk-Civelek D., Akdemir A., Supuran C. T., Güzel Akdemir Ö.
Bioorganic Chemistry, vol.144, 2024 (SCI-Expanded)
- II. **Thiosemicarbazone-benzenesulfonamide Derivatives as Human Carbonic Anhydrases Inhibitors: Synthesis, Characterization, and In silico Studies**
Trawally M., DEMİR YAZICI K., Angeli A., Kaya K., Akdemir A., Supuran C. T., GÜZEL AKDEMİR Ö.
Anti-Cancer Agents in Medicinal Chemistry, vol.24, no.9, pp.649-667, 2024 (SCI-Expanded)
- III. **Urease inhibitors for the treatment of H. pylori**
GÜZEL AKDEMİR Ö., Akdemir A.
Expert Opinion on Therapeutic Patents, 2024 (SCI-Expanded)
- IV. **Dithiocarbamates and dithiocarbonates containing 6-nitrosaccharin scaffold: Synthesis, antimycobacterial activity and in silico target prediction using ensemble docking-based reverse virtual screening**
Trawally M., Demir Yazıcı K., İpek Dingiş-Birgül S., Kaya K., Akdemir A., Güzel Akdemir Ö.
Journal of Molecular Structure, vol.1277, 2023 (SCI-Expanded)
- V. **Mandelic acid-based spirothiazolidinones targeting M. tuberculosis: Synthesis, in vitro and in silico investigations**
Trawally M., Demir-Yazıcı K., Dingiş Birgül S. İ., Kaya K., Akdemir A., Güzel-Akdemir Ö.

BIOORGANIC CHEMISTRY, vol.121, 2022 (SCI-Expanded)

- VI. **New Pyridinium Salt Derivatives of 2-(Hydrazinocarbonyl)-3-phenyl-1H-indole-5-sulfonamide as Selective Inhibitors of Tumour-Related Human Carbonic Anhydrase Isoforms IX and XII**
Güzel Akdemir Ö., Demir Yazıcı K., Vullo D., Supuran C. T., Akdemir A.
Anti-Cancer Agents in Medicinal Chemistry, vol.22, no.14, pp.2637-2646, 2022 (SCI-Expanded)
- VII. **Pyridinium derivatives of 3-aminobenzenesulfonamide are nanomolar-potent inhibitors of tumor-expressed carbonic anhydrase isozymes CA IX and CA XII**
Akocak S., Guzel-Akdemir O., Sanku R. K. K., Russom S. S., Iorga B. I., Supuran C. T., Ilies M. A.
BIOORGANIC CHEMISTRY, vol.103, 2020 (SCI-Expanded)
- VIII. **Synthesis and antibacterial activity of new hybrid derivatives of 5-sulfamoyl-1H-indole and 4-thiazolidinone groups**
Guzel-Akdemir O., Trawally M., Ozbek-Babuc M., Ozbek-Celik B., Ermut G., Ozdemir H.
MONATSHFTE FÜR CHEMIE, vol.151, pp.1443-1452, 2020 (SCI-Expanded)
- IX. **Novel Indole-Based Hydrazones as Potent Inhibitors of the alpha-class Carbonic Anhydrase from Pathogenic Bacterium *Vibrio cholerae***
Demir-Yazici K., Guzel-Akdemir Ö., Angeli A., Supuran C. T., Akdemir A.
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol.21, 2020 (SCI-Expanded)
- X. **Development of Thiazolidinones as Fungal Carbonic Anhydrase Inhibitors**
Guzel-Akdemir Ö., Carradori S., Grande R., Demir-Yazici K., Angeli A., Supuran C. T., AKDEMİR A.
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol.21, no.8, 2020 (SCI-Expanded)
- XI. **Indole-Based Hydrazones Containing A Sulfonamide Moiety as Selective Inhibitors of Tumor-Associated Human Carbonic Anhydrase Isoforms IX and XII**
Demir-Yazici K., Bua S., Akgunes N. M., Akdemir A., Supuran C. T., Guzel-Akdemir O.
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, vol.20, 2019 (SCI-Expanded)
- XII. **Novel thiazolidinone-containing compounds, without the well-known sulphonamide zinc-binding group acting as human carbonic anhydrase IX inhibitors**
Guzel-Akdemir O., Angeli A., Demir K., Supuran C. T., AKDEMİR A.
JOURNAL OF ENZYME INHIBITION AND MEDICINAL CHEMISTRY, vol.33, no.1, pp.1299-1308, 2018 (SCI-Expanded)
- XIII. **Isatin analogs as novel inhibitors of *Candida* spp. beta-carbonic anhydrase enzymes**
Akdemir A., Guzel-Akdemir O., Karali N. L., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.24, no.8, pp.1648-1652, 2016 (SCI-Expanded)
- XIV. **Discovery of novel isatin-based sulfonamides with potent and selective inhibition of the tumor-associated carbonic anhydrase isoforms IX and XII**
Guzel-Akdemir O., AKDEMİR A., Karali N., Supuran C. T.
ORGANIC & BIOMOLECULAR CHEMISTRY, vol.13, no.23, pp.6493-6499, 2015 (SCI-Expanded)
- XV. **Structural study of the location of the phenyl tail of benzene sulfonamides and the effect on human carbonic anhydrase inhibition**
Guzel-Akdemir O., Biswas S., Lastra K., McKenna R., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.21, no.21, pp.6674-6680, 2013 (SCI-Expanded)
- XVI. **Inhibition of tumor-associated human carbonic anhydrase isozymes IX and XII by a new class of substituted-phenylacetamido aromatic sulfonamides**
AKDEMİR A., Guzel-Akdemir O., Scozzafava A., Capasso C., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.21, no.17, pp.5228-5232, 2013 (SCI-Expanded)
- XVII. **A Class of Sulfonamides with Strong Inhibitory Action against the alpha-Carbonic Anhydrase from *Trypanosoma cruzi***
Guzel-Akdemir O., AKDEMİR A., Pan P., Vermelho A. B., Parkkila S., Scozzafava A., Capasso C., Supuran C. T.
JOURNAL OF MEDICINAL CHEMISTRY, vol.56, no.14, pp.5773-5781, 2013 (SCI-Expanded)
- XVIII. **o-Benzenedisulfonimido-sulfonamides are potent inhibitors of the tumor-associated carbonic anhydrase isoforms CA IX and CA XII**
Guzel-Akdemir O., Akdemir A., Işık S., Vullo D., Supuran C. T.

BIOORGANIC & MEDICINAL CHEMISTRY, vol.21, pp.1386-1391, 2013 (SCI-Expanded)

- XIX. **Conformational variability of different sulfonamide inhibitors with thienyl-acetamido moieties attributes to differential binding in the active site of cytosolic human carbonic anhydrase isoforms**
Biswas S., Aggarwal M., GÜZEL Ö., Scozzafava A., McKenna R., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.19, 2011 (SCI-Expanded)
- XX. **Carbonic anhydrase inhibitors. The β -carbonic anhydrases from the fungal pathogens *Cryptococcus neoformans* and *Candida albicans* are strongly inhibited by substituted-phenyl-1H-indole-5-sulfonamides**
GÜZEL Ö., Maresca A., Hall R. A., Scozzafava A., Mastrolorenzo A., Mühlischlegel F. A., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.20, pp.2508-2511, 2010 (SCI-Expanded)
- XXI. **3-Phenyl-1H-Indole-5-Sulfonamides: Structure-Based Drug Design of a Promising Class of Carbonic Anhydrase Inhibitors**
Guzel O., Innocenti A., Vullo D., Scozzafava A., Supuran C. T.
CURRENT PHARMACEUTICAL DESIGN, vol.16, no.29, pp.3317-3326, 2010 (SCI-Expanded)
- XXII. **Synthesis and biological evaluation of new 4-thiazolidinone derivatives**
Guzel O., Salman A.
JOURNAL OF ENZYME INHIBITION AND MEDICINAL CHEMISTRY, vol.24, no.4, pp.1015-1023, 2009 (SCI-Expanded)
- XXIII. **Carbonic anhydrase inhibitors. Aromatic/heterocyclic sulfonamides incorporating phenacetyl, pyridylacetyl and thienylacetyl tails act as potent inhibitors of human mitochondrial isoforms VA and VB**
Guzel O., Innocenti A., Scozzafava A., Salman A., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.17, no.14, pp.4894-4899, 2009 (SCI-Expanded)
- XXIV. **Discovery of Low Nanomolar and Subnanomolar Inhibitors of the Mycobacterial beta-Carbonic Anhydrases Rv1284 and Rv3273**
Guzel O., Maresca A., Scozzafava A., Salman A., Balaban A. T., Supuran C. T.
JOURNAL OF MEDICINAL CHEMISTRY, vol.52, no.13, pp.4063-4067, 2009 (SCI-Expanded)
- XXV. **Carbonic anhydrase inhibitors. Aromatic/heterocyclic sulfonamides incorporating phenacetyl, pyridylacetyl and thienylacetyl tails act as potent inhibitors of human mitochondrial isoforms VA and VB**
GÜZEL Ö., Innocenti A., Scozzafava A., Salman A., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.17, pp.4894-4899, 2009 (SCI-Expanded)
- XXVI. **Carbonic anhydrase inhibitors. Phenacetyl-, pyridylacetyl- and thienylacetyl-substituted aromatic sulfonamides act as potent and selective isoform VII inhibitors**
GÜZEL Ö., Innocenti A., Scozzafava A., Salman A., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.19, pp.3170-3173, 2009 (SCI-Expanded)
- XXVII. **Carbonic anhydrase inhibitors. The nematode alpha-carbonic anhydrase of *Caenorhabditis elegans* CAH-4b is highly inhibited by 2-(hydrazinocarbonyl)-3-substituted-phenyl-1H-indole-5-sulfonamides**
Guzel O., Innocenti A., Hall R. A., Scozzafava A., Mühlischlegel F. A., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.17, no.8, pp.3212-3215, 2009 (SCI-Expanded)
- XXVIII. **Carbonic anhydrase inhibitors. Synthesis of 2,4,6-trimethylpyridinium derivatives of 2-(hydrazinocarbonyl)-3-aryl-1H-indole-5-sulfonamides acting as potent inhibitors of the tumor-associated isoform IX and XII**
GÜZEL Ö., Maresca A., Scozzafava A., Salman A., Balaban A. T., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.19, pp.2931-2934, 2009 (SCI-Expanded)
- XXIX. **Crystal Structure of 1,1,3-trioxo-2,3-dihydro-1,2-benzisothiazol-2-ylmethyl 4-phenyl Piperazine-1-carbodithioate, C₁₉H₁₉N₃O₃S₃.**
AKKURT M., Yalçin S. P., Guzel O., Salman A., BÜYÜKGÜNGÖR O.
ACTA CRYSTALLOGRAPHICA A-FOUNDATION AND ADVANCES, vol.65, 2009 (SCI-Expanded)
- XXX. **Carbonic anhydrase inhibitors. Interaction of 2-(hydrazinocarbonyl)-3-phenyl-1H-indole-5-sulfonamide with 12 mammalian isoforms: kinetic and X-ray crystallographic studies**

- GÜZEL Ö., Temperini C., Innocenti A., Scozzafava A., Salman A., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, vol.18, pp.152-158, 2008 (SCI-Expanded)
- XXXI. **Synthesis and antituberculosis activity of 5-methyl/trifluoromethoxy-1H-indole-2,3-dione 3-thiosemicarbazone derivatives**
Guzel O., Karali N., Salman A.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.16, no.19, pp.8976-8987, 2008 (SCI-Expanded)
- XXXII. **N-(2,6-dimethyl-3-oxo-1-thia-4-azaspiro[4.5]dec-4-yl)-2-hydroxy-2,2-diphenylacetamide**
Yalcin S. P., AKKURT M., ŞAHİN E., Guzel O., Salman A., Ihan E.
ACTA CRYSTALLOGRAPHICA SECTION E-STRUCTURE REPORTS ONLINE, vol.64, 2008 (SCI-Expanded)
- XXXIII. **Carbonic anhydrase inhibitors. Synthesis and inhibition studies against mammalian isoforms I – XV with a series of 2-(hydrazinocarbonyl)-3-substituted-phenyl-1H-indole-5-sulfonamides**
GÜZEL Ö., Innocenti A., Scozzafava A., Salman A., Parkkila S., Hilvo M., Supuran C. T.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.16, pp.9113-9120, 2008 (SCI-Expanded)
- XXXIV. **Synthesis and antituberculosis activity of 5-methyl/trifluoromethoxy-1H-indole-2,3-dione-3-thiosemicarbazone derivatives**
GÜZEL Ö., Karali N., Salman A.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.16, pp.8976-8987, 2008 (SCI-Expanded)
- XXXV. **Crystal structure of (1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl O-propyl dithiocarbonate**
Akkurt M., Yalçın Ş. P., Büyükgüngör O., GÜZEL Ö., Salman A.
ANALYTICAL SCIENCES, vol.24, 2008 (SCI-Expanded)
- XXXVI. **1,1,3-Trioxo-2,3-dihydro-1,2-benzisothiazol-2-ylmethyl 4-phenylpiperazine-1-carbodithioate**
Akkurt M., Yalçın Ş. P., GÜZEL Ö., Salman A., Büyükgüngör O.
Acta Crystallographica, vol.E63, 2007 (SCI-Expanded)
- XXXVII. **N-(2,6-dimethyl-3-oxo-1-thia-4-azaspiro[4.5]dec-4-yl)-2-hydroxy-2,2-diphenylacetamide**
Yalçın Ş. P., Akkurt M., Şahin E., GÜZEL Ö., Salman A., İlhan E.
Acta Crystallographica, vol.E64, 2007 (SCI-Expanded)
- XXXVIII. **O-Butyl S-(1,1,3-trioksobenz[d]isothiazol-2-yl)methyl dithiocarbonate**
Akkurt M., Karaca S., Şahin E., GÜZEL Ö., Salman A.
Acta Crystallographica, vol.E63, 2007 (SCI-Expanded)
- XXXIX. **2-Hydroxy-N-(3-oxo-1-thia-4-azaspiro[4.5]dec-4-yl)-2,2-diphenylacetamide.**
Akkurt M., Karaca S., Şahin E., GÜZEL Ö., Salman A., İlhan E.
Acta Crystallographica, vol.E63, 2007 (SCI-Expanded)
- XL. **Synthesis, antimycobacterial and antitumor activities of new (1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl N,N-disubstituted dithiocarbamate/O-alkyldithiocarbonate derivatives**
Guzel O., Salman A.
BIOORGANIC & MEDICINAL CHEMISTRY, vol.14, no.23, pp.7804-7815, 2006 (SCI-Expanded)

Articles Published in Other Journals

- I. **Role of human carbonic anhydrase isoforms VA and VB in obesity: Implications, mechanisms, and therapeutic prospects**
Kaçmaz M., Trawally M., GÜZEL AKDEMİR Ö.
Journal of Research in Pharmacy, vol.28, no.3, pp.733-748, 2024 (ESCI)
- II. **Antiviral Properties of 5-Sulfamoyl-1H-Indole-Linked Spirothiazolidinone Derivatives: A Study on Human Parainfluenza Virus-2**
Trawally M., YILMAZ F. N., ÖZBEK ÇELİK B., Akdemir A., GÜZEL AKDEMİR Ö.
Journal of Research in Pharmacy, vol.28, no.1, pp.213-224, 2024 (ESCI)
- III. **Evaluation of some o-benzenedisulfonimido- sulfonamide derivatives as potent antimicrobial agents**
Demir Yazıcı K., Yılmaz F. N., Özbek Çelik B., Güzel Akdemir Ö.

Istanbul Journal of Pharmacy, vol.52, no.3, pp.297-301, 2022 (Peer-Reviewed Journal)

- IV. **Synthesis and potential antitumor activities of mandelic acid linked 2-aryl-1,3-thiazolidin-4-ones**
Demir-Yazici K., Guzel-Akdemir O.
JOURNAL OF RESEARCH IN PHARMACY, vol.26, no.4, pp.931-940, 2022 (ESCI)
- V. **Benzilic acid based new 2-aryl-1,3-thiazolidin-4-one derivatives: Synthesis and anticancer activity**
Güzel Akdemir Ö., Demir-Yazıcı K.
JOURNAL OF RESEARCH IN PHARMACY, vol.25, no.3, pp.305-317, 2021 (ESCI)
- VI. **Evaluation of new 2-hydroxy-N-(4-oxo-2-substituted phenyl-1,3-thiazolidin-3-yl)-2-phenylacetamide derivatives as potential antimycobacterial agents**
GÜZEL AKDEMİR Ö., DEMİR YAZICI K., TRAWALLY M., DİNGİŞ BİRGÜL S. İ., Akdemir A.
Organic Communications, vol.13, no.2, pp.33-50, 2020 (ESCI)
- VII. **Antimicrobial and antiviral activity of spiroindolinones bearing benzothiazolines moiety**
Güzel Ö., Karalı N. L., Ermut G., Birteksöz Tan A. S.
ISTANBUL JOURNAL OF PHARMACY, vol.43, no.1, pp.1-11, 2013 (ESCI)
- VIII. **Spectrophotometric determination of drugs having primary amine group with p-dimethylaminocinnamaldehyde**
GÜZEL Ö., Salman A.
TURKISH JOURNAL OF PHARMACEUTICAL SCIENCES, vol.4(1), pp.31-39, 2007 (Scopus)

Books & Book Chapters

- I. **Aromatase**
GÜZEL AKDEMİR Ö.
in: Metalloenzymes, Claudiu T. Supuran, William A. Donald, Editor, Academic Press is an imprint of Elsevier, pp.459-464, 2023
- II. **Piperine Derivatives: New Trends in Medicinal Chemistry**
Trifan A., GÜZEL AKDEMİR Ö., CARRADORI S.
in: Medicinal Chemistry Lessons From Nature (Volume 3) Alkaloids and Other Nitrogen-Containing Derivatives, Simone Carradori, Editor, Bentham Science Publishers Pte. Ltd. 80 Robinson Road #02-00, Singapore 068898, Singapore2023, pp.100-127, 2023
- III. **İlaç Tasarımı: hedef protein ile etkileşim optimizasyonu**
GÜZEL AKDEMİR Ö., AKDEMİR A.
in: Medisinal Kimya Giriş, Prof.Dr. Özekin Algül, Editor, Ankara Nobel Tıp Kitabevi, Ankara, pp.223-255, 2021
- IV. **Antibakteriyel Sülfâ İlaçları**
GÜZEL AKDEMİR Ö.
in: Medisinal Kimya, Mehmet Alp, Editor, Akademisyen Kitabevi, Ankara, pp.244-264, 2021
- V. **Foye Medisinal Kimya Temel İlkeler**
GÜZEL AKDEMİR Ö., AKDEMİR A.
Ankara Nobel, 2019
- VI. **Antipsikotik ve Anksiyolitik İlaçlar**
Güzel Akdemir Ö., Akdemir A.
in: Foye Medisinal Kimya Temel İlkeleri, Öztekin Algül, Kayhan Bolelli, Editor, Nobel Yayın Dağıtım, Ankara, pp.96-113, 2019
- VII. **The Structure, Physiological Role, and Potential Medicinal Applications of Carbonic Anhydrase V**
AKDEMİR A., GÜZEL AKDEMİR Ö.
in: Carbonic Anhydrases as Biocatalysts from Theory to Medical and Industrial Applications, Supuran Claudiu, Simone Giuseppina, Editor, Radarweg 29, PO Box 211, 1000 AE Amsterdam, The Netherlands The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK225 Wyman Street, Waltham, MA 02451, USA, pp.125-139, 2015

Refereed Congress / Symposium Publications in Proceedings

- I. **4-Tiyazolin Türevleri: Kolon ve Meme Kanseri Tedavisi İçin Potansiyel Adaylar Olarak. Tümörle İlişkili hCA IX/XII İnhibitörleri**
TRAWALLY M., GÜZEL AKDEMİR Ö.
VII. Ulusal Farmasötik Kimya Kongresi, Ege University, İzmir, October 26-28, 2024., İzmir, Turkey, 26 October 2024
- II. **4-Thiazoline Derivatives: Tumor-Associated HCA IX/XII Inhibitors as Potential Candidates for Colon and Breast Cancer Therapy.**
TRAWALLY M., GÜZEL AKDEMİR Ö.
11th EFMC Young Medicinal Chemists' Symposium (EFMC-YMCS), Rome, Italy, September 5 - 6, 2024., Rome, Italy, 5 - 06 September 2024
- III. **Thione or Thiol: Structural confirmation of (E)-2-(1-(4-cyanophenyl)ethylidene)-N-(2-fluoro-4-sulfamoylphenyl)hydrazine-1-carbothioamide and carbonic anhydrase inhibition studies**
Guliyeva L., M. T., GÜZEL AKDEMİR Ö.
8th International Students Science Congress, Turkey, 27 April 2024
- IV. **Synthesis, FTIR spectrum, experimental and theoretical crystal studies, and carbonic anhydrase inhibition studies on 2-[(1H-Pyrrol-2-yl)methylidene]-N-(3-sulfamoylphenyl)hydrazine-1-carbothioamide**
TRAWALLY M., DEMİR YAZICI K., KAYA K., AKDEMİR A., GÜZEL AKDEMİR Ö.
12th International Drug Chemistry Conferences, Antalya, Turkey, 07 March 2024
- V. **Development of Selective Inhibitors for the Tumor-Associated Carbonic Anhydrases**
AKDEMİR A., DEMİR YAZICI K., M. T., GÜZEL AKDEMİR Ö.
8th International Conference Modern Trends in Physics, Baku, Azerbaijan, 30 November 2023
- VI. **Modification of SLC-0111 as Novel Carbonic Anhydrase Inhibitors**
Guliyeva L., M. T., DEMİR YAZICI K., GÜZEL AKDEMİR Ö.
8th International Conference Modern Trends in Physics, Baku, Azerbaijan, 30 November 2023
- VII. **Novel sulfa drug containing thiourea derivatives: Synthesis, molecular modelling and inhibition studies of pharmaceutically important carbonic anhydrase isoforms**
M. T., DEMİR YAZICI K., AKDEMİR A., GÜZEL AKDEMİR Ö.
10th International Drug Chemistry Conferences, Turkey, 10 - 13 March 2023
- VIII. **Molecular Modeling Studies on Dithiocarbamates and Dithiocarbonates Containing 6-nitrosaccharin Scaffold as antitubercular agents**
DİNGİŞ BİRGÜL S. İ., M. T., DEMİR YAZICI K., GÜZEL AKDEMİR Ö., AKDEMİR A.
10th International Drug Chemistry Conferences, Turkey, 10 March 2022
- IX. **SYNTHESIS AND HUMAN CARBONIC ANHYDRASE INHIBITION STUDIES OF SOME 1,3,4-THIADIAZOLES**
Demir Yazıcı K., Güzel Akdemir Ö.
13th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 22 - 25 June 2021, pp.309
- X. **Mandelic acid-based novel spirothiazolidinones: Synthesis, antimycobacterial activity and molecular modelling studies**
M. T., DEMİR YAZICI K., DİNGİŞ BİRGÜL S. İ., GÜZEL AKDEMİR Ö., AKDEMİR A.
13th International Symposium on Pharmaceutical Sciences, 22 - 24 June 2021
- XI. **Synthesis and Antimycobacterial Activities of New Dithiocarbamates and Dithiocarbonates Containing 6-nitrosaccharin Scaffold**
M. T., GÜZEL AKDEMİR Ö.
9th International Drug Chemistry Conferences, Turkey, 8 - 11 April 2021
- XII. **NOVEL THIOSEMICARBAZONES-BASED BENZENESULFONAMIDE hCAII INHIBITORS: SYNTHESIS, BIOLOGICAL EVALUATION AND DOCKING STUDIES**
Trawally M., Demir Yazıcı K., Güzel Akdemir Ö., Akdemir A.
3rd INTERNATIONAL AFRICAN CONFERENCE ON CURRENT STUDIES, 27 February - 28 August 2021, pp.718
- XIII. **The Ongoing Quest for Selective hCA IX/XII Inhibitors**
GÜZEL AKDEMİR Ö., M. T., DEMİR YAZICI K., AKDEMİR A., Angeli A., Supuran C. T.

8th International Drug Chemistry Conferences, Turkey, 27 February - 01 March 2020

- XIV. **Synthesis and Inhibitory Activity of 2-(alkylidene/arylidene)-N-(2-(non) substituted-3/4-sulfamoylphenyl)hydrazine-1-carbothioamide Derivatives Tumor-Associated Carbonic Anhydrase hCA IX and hCA XII Inhibitors**
Trawally M., Demir Yazıcı K., Güzel Akdemir Ö.
8th International Drug Chemistry Conference, Antalya, Turkey, 27 February - 01 March 2020, pp.235
- XV. **Inhibition of the α -class Carbonic Anhydrase from *Vibrio cholera*(VchCA) with Novel Sulfonamido based Hydrazones**
Güzel Akdemir Ö., Demir Yazıcı K.
8th International Drug Chemistry Conference, Antalya, Turkey, 27 February - 01 March 2020, pp.69
- XVI. **New Sulfonamidoindole Based Hydrazones as Potent and Selective Inhibitors of Tumour-Related Human Carbonic Anhydrase IX and XII Isoforms**
DEMİR YAZICI K., Bua S., Akdemir A., Supuran C., GÜZEL AKDEMİR Ö.
4th Satellite International Meeting on Carbonic Anhydrase, Parma, Italy, 14 - 17 November 2019, vol.1, no.1, pp.11
- XVII. **Design and synthesis of novel indole based hydrazones containing sulfonamide moiety as selective inhibitors of tumour-associated carbonic anhydrase isoforms IX and XII**
DEMİR YAZICI K., Bua S., Akdemir A., Supuran C., GÜZEL AKDEMİR Ö.
4th Satellite International Meeting on Carbonic Anhydrase, Parma, Italy, 14 - 17 November 2019, vol.1, no.1, pp.10
- XVIII. **Tiyazolidinon iskeleti taşıyan bazı yeni bileşiklerin sentezi, yapılarının aydınlatılması ve antikanser aktivitelerinin incelenmesi**
DEMİR YAZICI K., GÜZEL AKDEMİR Ö.
2. Ulusal Marmara Eczacılık Kongresi (UMEK-2018), İstanbul, Turkey, 14 - 16 November 2018, pp.111
- XIX. **Molecular modelling studies to guide synthesis programs of new thiourea compounds as putative inhibitors of hCA IX/XII and VcCA.**
DEMİR K., Güzel Akdemir Ö., Karalı N., Akdemir A.
3rd Satellite Meeting on Carbonic Anhydrase, Montecatini Terme, Italy, 24 - 27 May 2017, pp.68
- XX. **Structurally novel thiazolidinone-containing compounds that do not contain sulfonamide groups display antifungal activity**
GÜZEL AKDEMİR Ö., Carradori S., Rivanera D., Çapan G., Akdemir A.
3rd Satellite Meeting on Carbonic Anhydrase, Montecatini Terme, Italy, 24 - 27 May 2017, pp.69
- XXI. **1H-indole-2,3-dione 3-[N-(4-sulfamoylphenyl)thiosemicarbazone] derivatives as putative anticancer and antifungal agents**
Akdemir A., KARALI N. L., Supuran C. T., GÜZEL AKDEMİR Ö.
7th European Congress of Pharmacology EPHAR 2016, İstanbul, Turkey, 27 - 30 June 2016, pp.1
- XXII. **Substituted-phenylacetamido aromatic sulfonamides are potent inhibitors of human and *Trypanosoma cruzi* carbonic anhydrases**
GÜZEL AKDEMİR Ö., Akdemir A., Pan P., Vermelho A. B., Parkkila S., Scozzafava A., Capasso C., Supuran C.
10th International Carbonic Anhydrase Conference, Maastricht, Netherlands, 20 - 22 April 2015, pp.48
- XXIII. **Inhibition of tumor-associated human carbonic anhydrase isozymes IX and XII by a new class of substituted-phenylacetamido aromatic sulfonamides**
Güzel Akdemir Ö., Akdemir A., Scozzafava A., Cappaso C., Supuran C. T.
Frontiers in CA research Dissemination Activity of the EU Project Metoxia, Pistoia, Italy, 18 - 20 April 2015, pp.1
- XXIV. **Potent Inhibitors of Mitochondrial Carbonic Anhydrase Isozyme CA-VA and CA-VB and brain associated isozyme CA-VII**
Akdemir A., GÜZEL Ö., Supuran C.
9th International Conference on the Carbonic Anhydrases, Antalya, Turkey, 11 - 15 April 2012, pp.67
- XXV. **Synthesis and Pharmacological Evaluation of New Series of 3-Phenyl-1H-indole-5-Sulfonamides as Promising Carbonic Anhydrase Inhibitors**
Güzel Akdemir Ö.
9th International Conference on the Carbonic Anhydrases, Antalya, Turkey, 11 - 15 April 2012, pp.35
- XXVI. **Pyridinium Derivatives of 3-Aminobenzensulfonamide-Structure-Activity Relationship as Carbonic**

Anhydrase Inhibitors

Akocak S., GÜZEL Ö., Supuran C., Ilies M. A.

9th International Conference on the Carbonic Anhydrases, Antalya, Turkey, 11 - 15 April 2012, pp.84

- XXVII. **5-triflorometoksi-1H-İndol-2,3-Dion 3-Tiyosemikarbazon Türevlerinin Miyeloid, Lenfoid Lösemi Hücreleri ve Akut Lenfoblastik Lösemi Hastalarının Periferik Kan Mononükleer Hücreleri Üzerine Sitotoksik Etkileri.**
Çetin M. B., Karadenizli S., Kuruca D. S., Karalı N. L., Güzel Akdemir Ö., Akgün Dar K., Gürel E.
III. Multidisipliner Kanser Araştırma Sempozyumu Teorik Metot Çalıştayı, Bursa, Turkey, 14 - 17 March 2010, pp.40
- XXVIII. **Carbonic anhydrase inhibitors. The nematode γ -carbonic anhydrase of *Caenorhabditis elegans* CAH-4b is highly inhibited by 2-(hydrazinocarbonyl)-3-substituted-phenyl-1H-indole-5-sulfonamides**
GÜZEL Ö., Innocenti A., Hall R. A., Scozzafava A., Mühlischlegel F. A., Supuran C.
8th International Conference on the Carbonic Anhydrases, Floransa, Italy, 16 - 19 September 2009, pp.43
- XXIX. **Synthesis and biological evaluation of new 6-nitrosaccharin derivatives**
GÜZEL Ö., Salman A.
9th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 23 - 26 June 2009, pp.190
- XXX. **Discovery of low nanomolar and subnanomolar inhibitors of the mycobacterial γ -carbonic anhydrases Rv1284 and Rv3273**
GÜZEL Ö., Maresca A., Scozzafava A., Salman A., Balaban A. T., Supuran C.
9th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 23 - 26 June 2009, pp.188
- XXXI. **Synthesis of new 4-thiazolidinone derivatives as potential antimycobacterial and antitumor agents**
GÜZEL Ö., Salman A.
3rd International Meeting on Medicinal and Pharmaceutical Chemistry (IMMPC-3), Antalya, Turkey, 16 - 21 October 2007, pp.70
- XXXII. **Synthesis and antimycobacterial activity of new 4-thiazolidinone derivatives**
GÜZEL AKDEMİR Ö., Salman A., ÇAPAN G.
3rd International Meeting on Medicinal and Pharmaceutical Chemistry, Antalya, Turkey, 16 - 21 October 2007, pp.1
- XXXIII. **Synthesis antimycobacterial and antitumor activities of new 5-bromo-N-(3-oxo-1-thia-4-azaspiro[4.4]non-4-yl)/N-(3-oxo-1-thia-4-azaspiro[4.5]dec-4-yl)-3-phenyl-1H-indole-2-carboxamide derivatives**
GÜZEL AKDEMİR Ö., ÇAPAN G., Salman A.
5 th International Symposium on Pharmaceutical Chemistry, İstanbul, Turkey, 5 - 07 September 2007, pp.57
- XXXIV. **Synthesis, characterization and antituberculosis activity of spiroindolinones**
Karalı N., GÜZEL Ö., Salman A.
5th International symposium on Pharmaceutical Chemistry, İstanbul, Turkey, 5 - 07 September 2007, pp.80
- XXXV. **One-pot synthesis synthesis of novel substituted 4-(3,4-dimethoxyphenyl)ethyl-1-thia-4-azaspiro[4.5]decan-3-ones**
GÜZEL Ö., Terzioğlu N., Gürsoy A.
3rd International Conference on Multi-Component Reactions and Related Chemistry, Amsterdam, Netherlands, 9 - 13 July 2006, pp.87
- XXXVI. **One-pot synthesis of novel substituted 4-morpholinoethyl-1-thia-4-azaspiro[4.5]decan-3-one**
Terzioğlu N., GÜZEL Ö., Gürsoy A.
3rd International Conference on Multi-Component Reactions and Related Chemistry, Amsterdam, Netherlands, 9 - 13 July 2006, pp.129
- XXXVII. **Synthesis, antimycobacterial and antitumor activities of new (1,1-dioxido-3-oxo-1,2-benzisothiazol-2(3H)-yl)methyl N,N-disubstituted dithiocarbamate / O-alkyldithiocarbonate derivatives**
Güzel Akdemir Ö., Salman A.
International Symposium on Medicinal Chemistry Research and Development, MCRD 2005, Aydın, Turkey, 28 September - 01 October 2005, pp.44
- XXXVIII. **New 2-hydroxy-N-(4-oxo-2-substituted phenyl-1,3-thiazolidin-3-yl)-2-phenylacetamide derivatives: synthesis and antimicrobial evaluation**
GÜZEL Ö., Salman A., Terzioğlu N., Çapan G.

2ND International Meeting on Medicinal and Pharmaceutical Chemistry IMMPC-2, Antalya, Turkey, 10 October 2004 - 14 October 2002, pp.141

XXXIX. **Synthesis and antimicrobial evaluation of new 2-hydroxy-N-(4-oxo-2-substituted phenyl-1,3-thiazolidine-3-yl)-2-phenylacetamide derivatives**

GÜZEL AKDEMİR Ö., Salman A., ÇAPAN G.

4th International Symposium on Pharmaceutical Chemistry, İstanbul, Turkey, 17 - 19 September 2003, pp.169

XL. **Spectrophotometric determination of some drugs incorporating primary amino functions**

GÜZEL Ö., Salman A.

1st International Meeting on Medicinal and Pharmaceutical Chemistry IMMPC-1, Ankara, Turkey, 25 - 28 September 2002, pp.78

XLI. **Synthesis and antimycobacterial activity of new 2-hydroxy-N-(3-oxo-1-thia-4-azaspiro[4.4]non-4-yl)/(3-oxo-1-thia-4-azaspiro[4.5]dec-4-yl)-2-phenyl-acetamide derivatives**

GÜZEL Ö., Çapan G., İlhan E., Salman A.

1st International Meeting on Medicinal and Pharmaceutical Chemistry IMMPC-1, Ankara, Turkey, 25 - 28 September 2002, pp.79

Supported Projects

GÜZEL AKDEMİR Ö., DİNCEL E. D., Project Supported by Higher Education Institutions, LC MS ve Distile Su Cihazı Onarımı Kapsamında Farmasötik Kimya Araştırma Laboratuvarı Altyapısı Sürekliliği Desteği, 2024 - 2024

GÜZEL AKDEMİR Ö., DEMİR YAZICI K., AKDEMİR A., Project Supported by Higher Education Institutions, İnsan Karbonik Anhidraz hCA IX ve XII Enzim İnhibisyonu Gösterebilecek 3-Fenil-5-Sülfamoil-1H-İndol Artığı Taşıyan Yeni Moleküller Üzerine Çalışmalar, 2018 - 2023

GÜZEL AKDEMİR Ö., DEMİR YAZICI K., AKDEMİR A., Project Supported by Higher Education Institutions, Sülfonamid grubu içeren yeni moleküllerin moleküler modellemesi, sentezi, yapı tayini ve karbonik anhidraz enzim inhibisyonlarının incelenmesi, 2019 - 2021

GÜZEL AKDEMİR Ö., KARALI N. L., DEMİR K., Project Supported by Higher Education Institutions, Sülfonamid grubu içeren yeni tiyoüre türevlerinin sentezi ve yapı tayini, 2016 - 2018

GÜZEL AKDEMİR Ö., AKDEMİR A., KARALI N. L., DEMİR K., Project Supported by Higher Education Institutions, Molecular modelling studies to guide synthesis programs of new thiourea compounds as putative inhibitors of hCA IX/XII and VcCA, 2017 - 2017

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, 3-Fenil-5-Sülfamoil-1H-İndol Artığı Taşıyan Spirotiyazolidinon Türevlerinin Sentezi, Yapı Tayini ve Biyolojik Etkilerinin İncelenmesi, 2012 - 2016

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, Substituted-phenylacetamido aromatic sulfonamides are potent inhibitors of human and Trypanosoma cruzi carbonic anhydrases, 2015 - 2015

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, 1,2-Benzendisulfonamid türevlerinin yapı tayini, 2012 - 2013

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, 1,2-Benzendisulfonamid türevlerinin sentezi, yapı tayini ve biyolojik etkilerinin incelenmesi, 2011 - 2013

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, Synthesis and Pharmacological Evaluation of New Series of 3-Phenyl-1H-indole-5-Sulfonamides as Promising Carbonic Anhydrase Inhibitors, 2012 - 2012

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, İndol artığı taşıyan benzensülfonamid türevlerinin sentezi ve yapılarının aydınlatılması, 2009 - 2011

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, Carbonic anhydrase inhibitors. The nematode ? -carbonic anhydrase of Caenorhabditis elegans CAH-4b is highly inhibited by, 2009 - 2009

GÜZEL AKDEMİR Ö., Project Supported by Higher Education Institutions, 5/6-substitüesakkarinler'in ditiyokarbamat ve alkoksitiyokarboniltiyo türevlerinin sentezi, yapılarının aydınlatılması ve biyolojik etkilerinin incelenmesi, 2008 - 2009

Patent

Karalı N. L., Güzel Akdemir Ö., Gül A., Erman B., Lack N., 1H-indole-2,3-dione-3-thiosemicarbazone derivatives as interleukin-1 receptor antagonist, Patent, CHAPTER A Human Needs, The Invention Recourse Number: TP16-431 , Standard Registration, 2016

Activities in Scientific Journals

Journal of Enzyme Inhibition and Medicinal Chemistry , Committee Member, 2011 - Continues

Memberships / Tasks in Scientific Organizations

Türk Farmasötik ve Medisinal Kimya Derneği, Member, 1998 - Continues

Scientific Refereeing

Journal of Enzyme Inhibition and Medicinal Chemistry, SCI Journal, January 2019

Journal of Enzyme Inhibition and Medicinal Chemistry, SCI Journal, January 2018

Journal of Enzyme Inhibition and Medicinal Chemistry, SCI Journal, January 2017

Journal of Enzyme Inhibition and Medicinal Chemistry, SCI Journal, January 2016

Journal of Enzyme Inhibition and Medicinal Chemistry , SCI Journal, January 2015

Bioorganic and Medicinal Chemistry, SCI Journal, January 2014

European journal of Medicinal Chemistry, SCI Journal, January 2013

Metrics

Publication: 96

Citation (WoS): 918

Citation (Scopus): 1070

H-Index (WoS): 14

H-Index (Scopus): 21

Congress and Symposium Activities

2. Ulusal Marmara Eczacılık Kongresi (UMEK-2018), Attendee, İstanbul, Turkey, 2018

3rd Satellite Meeting on Carbonic Anhydrase, Attendee, Firenze, Italy, 2017

10th International Carbonic Anhydrase Conference, Attendee, Maastricht, Netherlands, 2015

Frontiers in CA research, Attendee, Montecatini, Italy, 2013

9th International Conference on the Carbonic Anhydrases, Attendee, Antalya, Turkey, 2012

8th International Conference on the Carbonic Anhydrases, Attendee, Floransa, Italy, 2009

9th International Symposium on Pharmaceutical Sciences (ISOPS), Attendee, Ankara, Turkey, 2009

3rd International Meeting on Medicinal and Pharmaceutical Chemistry (IMMPC-3), Attendee, Antalya, Turkey, 2007

5th International symposium on Pharmaceutical Chemistry, Attendee, İstanbul, Turkey, 2007

3rd International Conference on Multi-Component Reactions and Related Chemistry, Attendee, Amsterdam, Turkey, 2006

International Symposium on Medicinal Chemistry Research and Development 2005, MCRD 2005, Attendee, Kuşadası, Turkey, 2005

2ND International Meeting on Medicinal and Pharmaceutical Chemistry IMMPC-2, Attendee, Antalya, Turkey, 2004

4th International Symposium on Pharmaceutical Chemistry, Attendee, Istanbul, Turkey, 2003

1st International Meeting on Medicinal and Pharmaceutical Chemistry IMMPC-1, Attendee, Ankara, Turkey, 2002

Non Academic Experience

İtalya, Floransa Üniversitesi, Kimya Fakültesi