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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAJ-7644-2021

ScopusID: 57407218700

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Education Information

Doctorate, Karadeniz Technical University, Sağlık Bilimleri Enstitüsü, Eczacılıkta Biyokimya, Turkey 2024 - Continues

Postgraduate, Karadeniz Technical University, Sağlık Bilimleri Enstitüsü, Eczacılık Biyokimya, Turkey 2021 - 2024

Undergraduate, Ankara University, Sağlık Bilimleri Fakültesi, Beslenme ve Diyetetik, Turkey 2013 - 2017

Foreign Languages

English, B1 Intermediate

Certificates, Courses and Trainings

Health&Medicine, 24 th APPLIED CELL CULTURE AND MOLECULAR BIOLOGY RESEARCH COURSE, Atlas Biotechnology, 2024

Health&Medicine, KLİNİK BİYOKİMYADA NANOTEKNOLOJİ VE UYGULAMALARI EĞİTİMİ, EGE ÜNİVERSİTESİ, Sürekli Eğitim Merkezi, 2022

Vocational Training, Eğitimcilerin Eğitimi Sertifika Programı, Karadeniz Teknik Üniversitesi, Sürekli Eğitim Uygulama ve Araştırma Merkezi, 2022

Occupational Health and Safety, İş Sağlığı ve Güvenliği Temel Eğitimi, Karadeniz Teknik Üniversitesi, 2021

Health&Medicine, Deney Hayvanları Kullanım Sertifikası Eğitimi, Karadeniz Teknik Üniversitesi, 2021

Research Areas

Health Sciences, Pharmacology and Therapeutics, Basic Pharmaceutics Sciences, Biochemistry

Academic Titles / Tasks

Research Assistant, Karadeniz Technical University, Eczacılık Fakültesi, Temel Eczacılık, 2020 - Continues

- I. **Synthesis and cholinesterases inhibitory effects of water soluble zinc(II) and silicon(IV) phthalocyanines bearing ({8-[3-(dimethylamino)phenoxy]octyl}oxy) groups**
Usta B., SEYHAN G., AKKAYA D., BARUT B., BIYIKLIOĞLU Z., ÖZEL A.
APPLIED ORGANOMETALLIC CHEMISTRY, vol.38, no.11, 2024 (SCI-Expanded)
- II. **The synthesis and therapeutic effect of silicon(IV) phthalocyanines for colorectal cancer cells in photodynamic therapy by altering Wnt/13-catenin and apoptotic signaling**
BARUT B., BARUT E. N., YALÇIN C. Ö., Ali Y. A., AKKAYA D., SEYHAN G., ENGİN S., BIYIKLIOĞLU Z.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY A-CHEMISTRY, vol.453, 2024 (SCI-Expanded)
- III. **Synthesis and cholinesterases inhibitory effects of water soluble zinc(II) and silicon(IV) phthalocyanines bearing ({8-[3-(dimethylamino)phenoxy]octyl}oxy) groups**
Usta B., Seyhan G., Akkaya D., Barut B., Biyiklioğlu Z., Özel A.
APPLIED ORGANOMETALLIC CHEMISTRY, no.x, pp.1-10, 2024 (SCI-Expanded)
- IV. **Alpha-glucosidase inhibitory effects of flavonoids, phenolic acids and iridoids isolated from Vinca soneri: In vitro and in silico perspectives**
Uyanır E., Soral M., Seyhan G., Akkaya D., Sarı S., Barut B., Duman H., Renda G., Şöhretoğlu D.
CHEMISTRY AND BIODIVERSITY, no.x, pp.1-10, 2024 (SCI-Expanded)
- V. **Effective α -glycosidase inhibitors based on polyphenolic benzothiazole heterocycles**
Sevimli E., SEYHAN G., AKKAYA D., SARI S., BARUT B., Koksoy B.
BIOORGANIC CHEMISTRY, vol.147, 2024 (SCI-Expanded)
- VI. **In vitro and in silico investigation of FDA-approved drugs to be repurposed against Alzheimer's disease**
Akkaya D., Seyhan G., Sari S., Barut B.
DRUG DEVELOPMENT RESEARCH, vol.85, no.3, 2024 (SCI-Expanded)
- VII. **Insights into the Biological Activity and Cytotoxic Mechanism of *Epimedium pubigerum***
SEYHAN G., AKKAYA D., KOLCİ K., REIS R., YAZICI BEKTAŞ N., BARUT E. N., BARUT B.
CHEMISTRY & BIODIVERSITY, vol.20, 2023 (SCI-Expanded)
- VIII. **Synthesis and biological evaluation of novel zinc (II) and nickel (II) phthalocyanines as cholinesterase inhibitors**
AKKAYA D., BARUT B., SARI S., REIS R., Fazlı H., BIYIKLIOĞLU Z., ÖZEL A.
JOURNAL OF ORGANOMETALLIC CHEMISTRY, vol.995, 2023 (SCI-Expanded)
- IX. **Azole derivatives inhibit wildtype butyrylcholinesterase and its common mutants**
SARI S., Onder S., AKKAYA D., SABUNCUOĞLU S., ZENGİN M., BARUT B., KARAKURT A.
DRUG DEVELOPMENT RESEARCH, vol.84, pp.1018-1028, 2023 (SCI-Expanded)
- X. **Novel different furoic acid-linked axial silicon phthalocyanines: Design, syntheses, cholinesterases, tyrosinase inhibitory, and DNA damage studies**
Yalazan H., AKKAYA D., Seyhan G., BARUT B., KANTEKİN H.
APPLIED ORGANOMETALLIC CHEMISTRY, vol.37, no.4, 2023 (SCI-Expanded)
- XI. **Evaluation of photodynamic therapy effects of novel zinc (II) phthalocyanine through a possible interaction with toll-like receptor signaling pathway**
Barut B., Yalçın C. Ö., Altun Y., Akkaya D., Barut E. N., Baş H., Biyiklioğlu Z.
APPLIED ORGANOMETALLIC CHEMISTRY, vol.37, no.4, 2023 (SCI-Expanded)
- XII. **Design, Synthesis, and Biological Evaluation of Some Benzothiazolone Derivatives as Cholinesterase Inhibitors**
ALAGÖZ M. A., AKKAYA D., ARSLAN G., Uludağ B., ÖZDEMİR Z., BARUT B., Önkol T., SARI S.
ChemistrySelect, vol.7, no.46, 2022 (SCI-Expanded)
- XIII. **Antifungal Azole Derivatives Featuring Naphthalene Prove Potent and Competitive Cholinesterase Inhibitors with Potential CNS Penetration According to the in Vitro and in Silico Studies**
SARI S., AKKAYA D., ZENGİN M., SABUNCUOĞLU S., ÖZDEMİR Z., ALAGÖZ M. A., KARAKURT A., BARUT B.
CHEMISTRY & BIODIVERSITY, vol.19, no.7, 2022 (SCI-Expanded)
- XIV. **Quinoline-fused both non-peripheral and peripheral Zn-II and Mg-II phthalocyanines: Anti-cholinesterase, anti-alpha-glucosidase, DNA nuclease, antioxidant activities, and in silico studies**

Yalazan H., TÜZÜN B., AKKAYA D., BARUT B., KANTEKİN H., YILDIRMIŞ S.

APPLIED ORGANOMETALLIC CHEMISTRY, vol.36, no.7, 2022 (SCI-Expanded)

- XV. **Synthesis and biological evaluation of peripherally tetra-({6-[3-(dimethylamino)phenoxy]hexyl}oxy) substituted water-soluble phthalocyanines as cholinesterases inhibitors**

BIYIKLIOĞLU Z., Bas H., AKKAYA D., BARUT B.

APPLIED ORGANOMETALLIC CHEMISTRY, vol.36, no.4, 2022 (SCI-Expanded)

- XVI. **Synthesis and in vitro α -glucosidase and cholinesterases inhibitory actions of water-soluble metallophthalocyanines bearing ({6-[3-(diethylamino)phenoxy]hexyl}oxy) groups**

KELEŞ T., BIYIKLIOĞLU Z., AKKAYA D., ÖZEL A., BARUT B.

Turkish Journal of Chemistry, vol.46, no.3, pp.786-795, 2022 (SCI-Expanded)

Articles Published in Other Journals

- I. **Synthesis, characterization and biological activity potential of some novel thiourea derivatives**

TÜRK S., AKKAYA D., KIRILMAZ B., ÖNAL E. M., BARUT B.

JOURNAL OF RESEARCH IN PHARMACY, vol.28, no.6, pp.1911-1920, 2024 (ESCI)

Books & Book Chapters

- I. **Aminoasitler ve Beyin**

BARUT B., AKKAYA D.

in: BEYİN BİYOKİMYASI, Fatih KAR, Ceyhan HACIOĞLU, Editor, NOBEL AKADEMİK YAYINCILIK, pp.31-53, 2023

Refereed Congress / Symposium Publications in Proceedings

- I. **The Radical Scavenging and Cyclooxygenases Inhibitory Effects of Alchemilla Daghestanica Juz**

Ortahisar M., Akkaya D., Seyhan G., Barut B., Yazıcı Bektaş N.

14th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 25 - 28 June 2024, pp.376

- II. **In Vitro Photodynamic Therapy Effects of Silicon (Iv) Phthalocyanine on Colorectal Cancer Cells**

Akkaya D., Barut B., Barut E. N., Engin S., Yalçın C. Ö.

4th International Symposium on Pharmaceutical Sciences (ISOPS), Ankara, Turkey, 25 - 28 June 2024

- III. **Synthesis and Biological Activity Studies on Novel Thiourea Derivatives**

Türk S., Akkaya D., Kırılmaz B., Önal E. M., Barut B.

14th International Symposium on Pharmaceutical Sciences-ISOPS 2024, Ankara, Turkey, 25 - 28 June 2024

- IV. **Biological Activity Studies on Alchemilla pseudocartalinica Juz.**

Uzunkaya Ç., Gökaya İ., Akkaya D., Barut B., Renda G.

PSE Meeting 2023, Antalya, Turkey, 12 - 15 October 2023, pp.105

- V. **Evaluation of cholinesterases inhibitory effects of some azole derivatives**

Akkaya D., Barut B., Sarı S., Özel A.

6th International Eurasian Conference on Biological and Chemical Sciences, 11 - 13 October 2023, pp.53

- VI. **In vitro investigation of biological activities of Epimedium pubigerum (DC.) Moren & Decne**

Seyhan G., Akkaya D., Reis R., Kolci K., Yazıcı Bektaş N., Barut E. N., Barut B.

International Multidisciplinary Symposium on Drug Research and Development - DRD 2023, İzmir, Turkey, 4 - 06 May 2023, pp.271

- VII. **Anticholinesterase properties of novel phthalocyanines**

Akkaya D., Reis R., Sarı S., Biyıklıoğlu Z., Özel A., Barut B.

International Multidisciplinary Symposium on Drug Research and Development - DRD 2023, İzmir, Turkey, 4 - 06 May 2023, pp.270

- VIII. **Comparison of Antioxidant Activities of Rosmarinus officinalis L. Extracts and Commercial Products**
Ersoy S., Akkaya D., Gökkaya I., Barut B., Renda G.
The 9th International Mediterranean Symposium on Medicinal and Aromatic Plants, Ankara, Turkey, 3 - 05 May 2023, pp.96
- IX. **Role of Toll-Like Receptors in Photodynamic Therapy of Novel Zn(II) Phtalocyanine Compound On Lung Cancer Cells**
Barut B., Altun Ali Y., Akkaya D., Barut E. N., Baş H., Yalçın C. Ö., Bıyıkhoğlu Z.
International Biochemistry Congress 2022, İzmir, Turkey, 26 - 30 October 2022, pp.44
- X. **In Vitro and in silico investigations for the anticholinesterase effects of some imidazole derivatives**
Akkaya D., Barut B., Sarı S., Sabuncuoğlu S.
TBS International Biochemistry Congress 2021-32nd National Biochemistry Congress, Gaziantep, Turkey, 27 - 30 October 2021, pp.113
- XI. **Kinolin grubu içeren periferel ve non-periferel çinko ve magnezyum ftalosiyanın bileşiklerinin sentezi, asetilkolinesteraz (AChE), butirilkolinesteraz (BuChE) ve glukozidaz enzimleri üzerindeki inhibitör etkileri**
Yalazan H., Akkaya D., Barut B., Yıldırım S., Kantekin H.
33. Ulusal Kimya Kongresi, Tekirdağ, Turkey, 7 - 09 October 2021, pp.23

Supported Projects

- BIYIKLIOĞLU Z., YALÇIN C. Ö., ALTUN Y., BAŞ H., KELEŞ T., AKKAYA D., Project Supported by Higher Education Institutions, Aksiyal Periferel NonPeriferel Antrakınon Süstitüe Silisyum ve Çinko Ftalosiyanın Sentezi DNA Etkileşimleri ve Akciğer Kolorektal Kanser Hücre Hatlarına Karşı in vitro Sitotoksik ve Fotodinamik Terapi Etkilerinin İncelenmesi, 2023 - Continues
- Barut B., Bıyıkhoğlu Z., Yalçın C. Ö., Barut E. N., Seyhan G., Akkaya D., Altun Ali Y., Research Project of the Presidency of Turkey Health Institutes (TÜSEB), Endometrial kanser tedavisi için yeni FDT ajanların geliştirilmesi ve in vitro etkinliklerinin incelenmesi, 2024 - 2025
- ÖZEL A., YALÇIN C. Ö., BARUT B., AKKAYA D., ALTUN Y., SARI S., USTA B., Project Supported by Higher Education Institutions, Bazı Azol Türevlerinin Biyolojik Etkinliklerinin Değerlendirilmesi ve Moleküler Modelleme Çalışması, 2022 - 2024
- BARUT B., ALTUN Y., BIYIKLIOĞLU Z., ÖZEL A., YALÇIN C. Ö., BARUT E. N., ENGİN S., AKKAYA D., Project Supported by Higher Education Institutions, Silisyum Ftalosiyanın Bileşiklerinin Kolorektal Kanser Hücre Hattına Karşı Fotodinamik Terapi Etkilerinin ve Wnt Yolağı ile İlişkinin Araştırılması, 2022 - 2024

Memberships / Tasks in Scientific Organizations

Türk Biyokimya Derneği, Member, 2021 - Continues, Turkey

Scientific Research / Working Group Memberships

Biopharmacy Research Group, Karadeniz Technical University, Turkey, <https://avesis.ktu.edu.tr/arastirma-grubu/bprg>, 2024 - Continues

Metrics

Publication: 31

Citation (WoS): 47

Citation (Scopus): 53

H-Index (WoS): 5

H-Index (Scopus): 5

Congress and Symposium Activities

14th International Symposium on Pharmaceutical Sciences (ISOPS), Attendee, Ankara, Turkey, 2024

6th International Eurasian Conference of Biological and Chemical Sciences (EurasianBioChem), Attendee, Ankara, Turkey, 2023

International Multidisciplinary Symposium on Drug Research and Development (DRD) 2023, Attendee, İzmir, Turkey, 2023

TBS International Biochemistry Congress 2021-32nd National Biochemistry Congress, Attendee, Gaziantep, Turkey, 2021

Scholarships

Genç Araştırmacılar için TBD Kayıt Bursu, Special Institutions and Organizations, 2021 - 2021

Awards

Barut B., Altun Y., Akkaya D., Barut E. N., Baş H., Yalçın C. Ö., Bıyıkhoğlu Z., Uluslararası Biyokimya Kongresi 2022 // 33. Ulusal Biyokimya Kongresi En İyi Poster Ödülü, Uluslararası Biyokimya Kongresi 2022 // 33. Ulusal Biyokimya Kongresi, October 2022