

Assoc. Prof. Azade ATTAR

Personal Information

Email: aattar@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/aattar>

International Researcher IDs

ORCID: 0000-0001-6906-6989

ScopusID: 55755380000

Yoksis Researcher ID: 174856

Education Information

Doctorate, Yildiz Technical University, Faculty Of Arts & Science, Kimya, Turkey 2004 - 2010

Postgraduate, Istanbul Technical University, Fen-Edebiyat Fakültesi, Moleküler Biyoloji Ve Genetik, Turkey 2001 - 2004

Undergraduate, Hacettepe University, Fen Fakültesi, Biyoloji, Turkey 1997 - 2001

Research Areas

Soil and Plant Feed, Biomolecules, Molecular Biochemistry, Biotechnology, Industrial Biotechnology, Microbial Biotechnology, Environmental Biology, Microbiology

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Bioengineering, 2005 - Continues

Courses

Mikrobiyal Biyoteknoloji, Postgraduate, 2022 - 2023

Biotechnology and biosecurity, Undergraduate, 2019 - 2020

Introduction to modern biology, Undergraduate, 2019 - 2020

Biyomühendislikte Mesleki İngilizce II, Undergraduate, 2017 - 2018

Advising Theses

ATTAR A., Halofilik Arkeal Kaynaklı Lipaz Üretim Koşullarının Optimizasyonu ve Aktif Lipazın Saflaştırılması, Postgraduate, M.Özgen(Student), 2016

ATTAR A., Tüberküloz ilaçları; Rifampicin ve İzonyazidin Arkeozomlardan Salınımının İncelenmesi, Postgraduate, C.Bakır(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Biofabrication of Acer palmatum-Mediated Multifunctional CuO Nanoparticles for Dye Removal, Antibacterial-Antifungal Activity, and Molecular Docking**
Sazak C., ATTAR A., YILMAZ A., ALTIKATOĞLU YAPAÖZ M.
ACS Omega, vol.8, no.40, pp.36835-36844, 2023 (SCI-Expanded)
- II. **Biogenic synthesis, molecular docking, biomedical and environmental applications of multifunctional CuO nanoparticles mediated Phragmites australis**
Kocabas B. B., Attar A., Yuka S., Yapaoz M. A.
BIOORGANIC CHEMISTRY, vol.133, pp.106414, 2023 (SCI-Expanded)
- III. **Experimental investigation of bimetallic nanoparticles heat transfer characteristics in automotive radiators**
Arbak A., ATTAR A., ALTIKATOĞLU YAPAÖZ M., ARMAĞAN M., Bulbul Y., Demir E. K., Karagöz Y.
Case Studies in Thermal Engineering, vol.43, 2023 (SCI-Expanded)
- IV. **The analysis of methylxanthine fractions obtained from Camellia sinensis cultivated in Turkey and effects on the in vitro inhibition of CYP2D6 enzyme**
Attar A., Altıkatoğlu Yapaöz M.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.70, no.1, pp.22-27, 2023 (SCI-Expanded)
- V. **Heat transfer performance of sol-gel synthesized CuONP-doped coolant in diesel engines**
Karagoz Y., Attar A., Arbak A., Pusat Ş.
Case Studies in Thermal Engineering, vol.37, 2022 (SCI-Expanded)
- VI. **Bioinspired fabrication of CuONPs synthesized via Cotoneaster and application in dye removal: antioxidant and antibacterial studies**
Işıksel E., Attar A., Mutlu Ö., Altıkatoğlu Yapaöz M.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, no.2022, pp.1-10, 2022 (SCI-Expanded)
- VII. **Phytosynthesis of CuONPs via Laurus nobilis: Determination of antioxidant content, antibacterial activity, and dye decolorization potential**
Bulut Kocabas B., Attar A., Peksel A., Altıkatoğlu Yapaöz M.
BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, vol.68, no.4, pp.889-895, 2021 (SCI-Expanded)
- VIII. **Fuel consumption and emission comparison of conventional and hydrogen feed vehicles**
BALCI Ö., Karagöz Y., KALE S., Damar S., ATTAR A., Köten H., DALKILIÇ A. S., Wongwises S.
International Journal of Hydrogen Energy, vol.46, pp.16250-16266, 2021 (SCI-Expanded)
- IX. **Complexes of glucose oxidase with chitosan and dextran possessing enhanced stability**
Baykal E., Vardar G., Attar A., Altıkatoğlu Yapaöz M.
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.50, no.6, pp.572-577, 2020 (SCI-Expanded)
- X. **An accomplished procedure of horseradish peroxidase immobilization for removal of acid yellow 11 in aqueous solutions**
ALTIKATOĞLU YAPAÖZ M., ATTAR A.
WATER SCIENCE AND TECHNOLOGY, vol.81, no.12, pp.2664-2673, 2020 (SCI-Expanded)
- XI. **Trace analysis of amines in cheese serum with liquid chromatographic potentiometric detection by using amine-selective electrode**
Aydin R., Asan A., ATTAR A., İŞILDAK İ.
ARABIAN JOURNAL OF CHEMISTRY, vol.12, no.8, pp.4533-4540, 2019 (SCI-Expanded)
- XII. **Development of urea biosensor using non-covalent complexes of urease with aldehyde derivative of PEG and analysis on serum samples**
Vardar G., Attar A., Yapaoz M.
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.49, no.9, pp.868-875, 2019 (SCI-Expanded)
- XIII. **Salvia officinalis-derived rutile TiO(2)NPs: production, characterization, antibacterial evaluation and its effect on decolorization**
Yapaoz M. A., Attar A.
MATERIALS RESEARCH EXPRESS, vol.6, no.5, 2019 (SCI-Expanded)
- XIV. **Effects of Azorhizophilus paspali and Paenibacillus mucilaginosus as Biofertilizer and Determination of Nutritional Efficiency by Sensors**

- Attar A.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.43, no.7, pp.3477-3484, 2018 (SCI-Expanded)
- XV. **Biomimetic synthesis, characterization and antibacterial efficacy of ZnO and Au nanoparticles using echinacea flower extract precursor**
Attar A., Yapaoz M.
MATERIALS RESEARCH EXPRESS, vol.5, no.5, 2018 (SCI-Expanded)
- XVI. **Biosynthesis of palladium nanoparticles using Diospyros kaki leaf extract and determination of antibacterial efficacy**
Attar A., Yapaoz M.
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.48, no.7, pp.629-634, 2018 (SCI-Expanded)
- XVII. **A Novel all Solid-State Contact PVC-Membrane Beryllium-Selective Electrode Based on 4-Hydroxybenzo-15-Crown-5 Ether Ionophore**
IŞILDAK İ., ATTAR A., Demir E., Kemer B., Aboul-Enein H. Y.
CURRENT ANALYTICAL CHEMISTRY, vol.14, no.1, pp.43-48, 2018 (SCI-Expanded)
- XVIII. **Preparation, characterization, and in vitro evaluation of isoniazid and rifampicin-loaded archaeosomes**
ATTAR A., Bakir C., Yuce-Dursun B., DEMİR S., ÇAKMAKÇI E., DANIŞ Ö., BİRBİR M., OGAN A.
CHEMICAL BIOLOGY & DRUG DESIGN, vol.91, no.1, pp.153-161, 2018 (SCI-Expanded)
- XIX. **GREEN SYNTHESIS OF COPPER OXIDE NANOPARTICLES USING OCIMUM BASILICUM EXTRACT AND THEIR ANTIBACTERIAL ACTIVITY**
Altikatoglu M., ATTAR A., ERCİ F., Cristache C. M., IŞILDAK İ.
FRESENIUS ENVIRONMENTAL BULLETIN, vol.26, pp.7832-7837, 2017 (SCI-Expanded)
- XX. **Gen terapi yöntemleri: Fiziksel ve kimyasal metodlar**
ATTAR A.
Türk Hijyen ve Deneysel Biyoloji Dergisi, vol.74, no.1, pp.103-112, 2016 (SCI-Expanded)
- XXI. **Enzymatic activity of a novel halotolerant lipase from Haloarcula hispanica 2TK2**
Ozgen M., Attar A., Elalmış Y., Birbir M., Yücel S.
POLISH JOURNAL OF CHEMICAL TECHNOLOGY, vol.18, pp.20-25, 2016 (SCI-Expanded)
- XXII. **Simultaneous Analysis of Monovalent Anions and Cations with a Sub-Microliter Dead-Volume Flow-Through Potentiometric Detector for Ion Chromatography.**
DUMANLI R., ATTAR A., ERCİ V., Isildak I.
Journal of chromatographic science, vol.54, pp.598-603, 2016 (SCI-Expanded)
- XXIII. **The potential of archaeosomes as carriers of pDNA into mammalian cells**
Attar A., Ogan A., Yucel S., Turan K.
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.44, no.2, pp.710-716, 2016 (SCI-Expanded)
- XXIV. **Transesterification of hazelnut oil by ultrasonic irradiation**
Kesgin C., Yücel S., Özçimen D., Terzioğlu P., Attar A.
INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.13, pp.328-333, 2016 (SCI-Expanded)
- XXV. **Development of Potentiometric Lactate Biosensor Based on Composite pH Sensor**
Uygun H. D. E., TINKILIÇ N., ATTAR A., IŞILDAK İ.
JOURNAL OF NEW MATERIALS FOR ELECTROCHEMICAL SYSTEMS, vol.19, no.3, pp.151-156, 2016 (SCI-Expanded)
- XXVI. **Preparation of poly(3-hydroxybutyrate-co-hydroxyvalerate) films from halophilic archaea and their potential use in drug delivery**
DANIŞ Ö., OGAN A., Tatlican P., ATTAR A., ÇAKMAKÇI E., MERTOĞLU B., BİRBİR M.
EXTREMOPHILES, vol.19, no.2, pp.515-524, 2015 (SCI-Expanded)
- XXVII. **A new type of Fe²⁺ based silicone composite pH electrode and potentiometric applications**
Ozturk S., IŞILDAK İ., ATTAR A., Andac M.
Sensor Letters, vol.13, no.5, pp.393-397, 2015 (SCI-Expanded)
- XXVIII. **A Novel Potentiometric Sensor for Determination of Neurotoxin ss-N-Oxalyl-L-alpha, ss-Diaminopropionic Acid**

Articles Published in Other Journals

- I. **Production of Fungal and Archaeal Lipases, Comparison of their Enzymatic Activities and Utilization in Paper Production**
Attar A.
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.13, no.3, pp.823-828, 2017 (Peer-Reviewed Journal)
- II. **Gene therapy techniques: Physical and chemical methods Gen terapisi yöntemleri: Fiziksel ve kimyasal metotlar**
Attar A.
Turk Hijyen ve Deneysel Biyoloji Dergisi, vol.74, no.1, pp.103-112, 2017 (Scopus)
- III. **Production of α -Amylase from Haloarcula hispanica 2TK2 Strain: Optimization of the Parameters That Effecting Activity**
Erdağı A. N., Attar A., Elalmış Y., Yücel S., Birbir M.
Advanced Science Letters, vol.19, no.12, pp.3551-3555, 2013 (Peer-Reviewed Journal)
- IV. **The Effect of Antioxidants on Antibiotic Sensitivity of Bacteria**
Qurbanov A. İ., Attar A.
TURK HIJYEN VE DENEYSEL BIYOLOJİ DERGISI. TURKISH BULLETIN OF HYGIENE AND EXPERIMENTAL BIOLOGY, vol.64, no.2, pp.14-20, 2007 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **On Vehicle Comparison of Gasoline Fueled SI Engine, Hydrogen Fueled SI Engine and Hydrogen Fueled SI Engine Microbial Fuel Cell Powered Systems**
Attar A., Karagöz Y., Balcı Ö., Kale S., Köten H.
4th International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 June 2019, no.154, pp.298-301
- II. **Comparison of emission and fuel consumption values of a gasoline fuelled and gasoline hydrogen fuelled SI engine powered light duty vehicle in new european driving cycle**
Karagöz Y., Attar A., Balcı Ö., Köten H.
4th International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 June 2019, no.153, pp.294-297
- III. **Haloarcula Hispanica'nın Lipolitik Aktivitesinin İncelenmes**
YÜCEL S., ATTAR A., ATLANEL S.
8. Ulusal Kimya Öğrenci Kongresi (UKOK 2017), İstanbul, Turkey, 16 May 2017
- IV. **Aspergillus Niger'den Lipaz Üretimi ve Enzim Aktivitesinin Tayini**
YÜCEL S., ATTAR A., EREN B., YILMAZ Ç.
8. Ulusal Kimya Öğrenci Kongresi (UKOK 2017), İstanbul, Turkey, 16 May 2017
- V. **Fungal lipase utilization in recycled paper production**
ATTAR A.
Istanbul International Conference on Progres in Applied Science 2017, İstanbul, Turkey, 04 January 2017, pp.48-52
- VI. **Production of Plant Nutrients and Energy in Microbial Fuel Cell**
ATTAR A., İŞILDAK İ.
ISTANBUL INTERNATIONAL CONFERENCE ON PROGRESS IN APPLIED SCIENCE 2017, İstanbul, Turkey, 4 - 06 January 2017, vol.1, pp.221-225
- VII. **Archaeosomes made up of archaic bacterial lipids**
ATTAR A.
EuroFed Lipid 2016, Ghent, Belgium, 20 October 2016, pp.1
- VIII. **Effect of Oil Types and Fatty Acids as Carbon Source on Growth of Extremophilic Archaea for Lipase**

Production

Yücel S., Attar A., Elalmış Y.

14th Euro Fed Lipid Congress Fats, Oils and Lipids, Ghent, Belgium, 18 September 2016, pp.263

- IX. **Development and formulation of new solid bio fertilizer macrocapsules**
ERCİ F., TORLAK E., ERCİ V., ATTAR A., İŞILDAK İ.
2nd International Conference on Pure & Applied Science, 1 - 05 June 2016
- X. **Membrane Lipids in Archaic Microorganisms**
ATTAR A., Yücel S.
13th Euro Fed Lipid Congress, 01 September 2015, pp.307
- XI. **Lipase Enzyme Production from Halophilic Microorganisms**
Temel M., Elalmış Y., Yücel S., ATTAR A.
13th Euro Fed Lipid Congress, 01 September 2015
- XII. **LL-37 Antimikrobiyal Peptidinin Lipozomlara Yüklenmesi Ve Salınımının İncelenmesi**
ATTAR A., Yüce Dursun B., Demir S., Ogan A.
27. Ulusal Kimya Kongresi, KİMYA 2015, 01 August 2015
- XIII. **Release Studies of Rifampicin from Extremely Halophilic Archaeon Haloarcula 2TK2**
ATTAR A., Ogan A., Demir S., Uğurlu S., Çakmakçı E., Danış Ö., Birbir M.
MolChem2014, 01 December 2014
- XIV. **A novel pH detector for the determination of anions in suppressed ion chromatography**
ERCİ F., NİĞDE M., YILDIRIM R., ATTAR A., AĞIR İ., Tavukçuoğlu Ö., İŞILDAK İ.
Bioeng'14 International Bioengineering Conference, 30 November - 02 December 2014
- XV. **Microorganisms as biofertilizer**
ATTAR A., Özer T., İşildak İ.
BIO ENG'14, 01 November 2014, vol.1, pp.337
- XVI. **A novel pH detector for the determination of anions in suppressed ion chromatography**
Niğde M., Yıldırım R., ATTAR A., Ağır İ., Tavukçuoğlu Ö., İşildak İ.
BIO ENG'14, 01 November 2014, vol.1, pp.341
- XVII. **Mikroorganizma içeren tablet biyogübre**
Özçimen D., Jahan I., ATTAR A.
Yıldızlı Patentler Temiz Çevre Teknolojileri Proje Pazarı, 01 October 2014, pp.73
- XVIII. **Preparation of Silver Loaded Zeolite NaA from Wheat Husk Silica as An Antibacterial Agent**
Terzioğlu P., ATTAR A., Gürlek S.
20th International Symposium on Biomedical Science and Technology (BIOMED 2014), 01 August 2014
- XIX. **A Novel Micro-Sized Lithium-Selective Sensor with Quite Improved Selectivity and Its Direct Use in Biological Samples.**
ALTIKATOĞLU YAPAÖZ M., ATTAR A., NİĞDE M., AĞIR İ., İŞILDAK İ.
International Symposium on Sustainable Development ISSD 2014, 8 - 11 May 2014
- XX. **Tarımsal Uygulamalar için Süperadsorban Biyouyumlu Hidrojel**
Topuzoğulları M., Erci V., Özer T., Niğde M., Üner D., ATTAR A.
İlk İşim Girişim Endüstriyel Rekabetçilik Proje Pazarı, 01 May 2014
- XXI. **A Novel Composite Membrane Phosphate-Selective Sensor and Application for Phosphate Detection in Different Soil Extractants**
Tavukçuoğlu Ö., Özer T., ATTAR A., İşildak İ.
International Symposium on Sustainable Development ISSD 2014, 01 May 2014
- XXII. **Süperadsorban Polimerik Jeller**
Cemek M., Topuzoğulları M., ATTAR A., Yıldırım R.
I. Patent Atelyesi ve İmalat Teknolojileri Proje Pazarı, 01 December 2013, pp.131
- XXIII. **Development of a Potassium Selective Sensor for Hydroponic Nutrient Solution Monitoring**
YILDIRIM R., AĞIR İ., ALTIKATOĞLU YAPAÖZ M., ATTAR A., ERCİ V., İŞILDAK İ.
10th International Electrochemistry Meeting in Turkey, 4 - 08 September 2013, pp.162
- XXIV. **Development of the Real-Time pH Measurement System for Hydroponic Nutrient Solutions Using**

Wireless Technology

Ađır İ., Yıldırım R., Vardar G., Özer T., Erkal S. D., ATTAR A., Altıkatođlu M.

10th International Electrochemistry Meeting, 01 September 2013, pp.163

- XXV. **Development of a Potassium-Selective Sensor for Hydroponic Nutrient Solution Monitoring**
Ađır İ., Altıkatođlu M., ATTAR A., Erci V., Işıldak İ.
10th International Electrochemistry Meeting, 01 September 2013, pp.162
- XXVI. **The Investigation of Antibacterial Effects of Various 4-Aryl Substituted Coumarin Derivatives**
Danış Ö., Yüce Dursun B., ATTAR A.
38th FEBS Congress, 01 July 2013, vol.280, pp.360
- XXVII. **Yenilenebilir Biyoenerji: Biyokütle**
ATTAR A., Vardar G., Erkal S. D., Işıldak İ.
3. Ar-Ge Proje Pazarı Enerji Teknolojileri, 01 May 2013
- XXVIII. **Tuz Gölünden Yüksek Tuz Konsantrasyonlarına Dayanıklı Enzimler**
ATTAR A., Elalmış Y., Erdađı N.
II. AR-GE Proje Pazarı, 01 May 2012, vol.1, pp.145
- XXIX. **Topraksız Domates Yetiştirme Ortamları**
Işıldak İ., ATTAR A.
II. AR-GE Proje Pazarı, 01 May 2012, vol.1, pp.111
- XXX. **Mikrobiyal Gübre Üretimi**
ATTAR A.
II. AR-GE Proje Pazarı, 01 May 2012, vol.1, pp.38
- XXXI. **Production of Alpha-Amylase from Archaeal Source**
ATTAR A., Ejder G., Yücel S.
Journées Internationales de Biologie (JIB) 56th International Congress and Exhibition of Biology, 01 November 2011, vol.56, pp.62
- XXXII. **Characterization of Archaeosomes Prepared from Haloarcula hispanica**
ATTAR A., Yücel S., Turan K.
16th International Biomedical Science & Technology Symposium (BIOMED 2010), 01 October 2010
- XXXIII. **An investigation on archaeosomes as DNA carrier into the mammalian cells**
ATTAR A., Turan K., Ogan A., Birbir M., Kuzu H.
3rd International Meeting on Pharmacy and Pharmaceutical Sciences (IMPPC-3), 01 June 2010, vol.3
- XXXIV. **Degradation of Pitch Components in Recycled Chipboard Production by Fungal Lipase**
ATTAR A., Bermek H., Tamerler C.
10th Netherlands Biotechnology Congress, 01 March 2004

Supported Projects

ATTAR A., Project Supported by Higher Education Institutions, Muz kabuđu deđerlendirilerek bakteriyel PHA üretimi, 2022 - Continues

ATTAR A., Sazak C., Project Supported by Higher Education Institutions, Misk çiçeđi ve Akçaađaç ekstreleri kullanılarak bakır oksit nanopartiküllerinin sentezi karakterizasyonu antibakteriyel ve antifungal özelliklerinin incelenmesi, 2022 - 2023

ATTAR A., Project Supported by Higher Education Institutions, Geri kazanımlı karbon kaynaklarından bakteriyel biyoplastik üretimi, 2019 - 2021

ATTAR A., Project Supported by Higher Education Institutions, KONTROLLÜ SALIM YAPAN MİKROBİYAL BİYOGÜBRE, 2016 - 2018

ALTİKATOĐLU YAPAÖZ M., ATTAR A., VARDAR G., ÖZTOLAN Ö., Project Supported by Higher Education Institutions, Üreaz-Dekstran Konjugat ve Komplekslerinin Hazırlanması ve İncelenmesi, 2016 - 2018

Attar A., Erci F., Işıldak İ., Industrial Thesis Project, Tablet Biyogübre (Mikrobiyal Gübre) Gelistirilmesi ve Üretimi, 2015 - 2016

Işıldak İ., Yıldırım R., Attar A., Özer T., Project Supported by Higher Education Institutions, Mikrobiyal Yakıt Piliinde Eş Zamanlı Bitki Besin Elementleri ve Elektrik Enerjisi Üretimi, 2013 - 2015

Yücel S., Elalmış Y., Attar A., Project Supported by Higher Education Institutions, Arkeal Kaynaklı α -Amilaz ve Selüloz Enzimlerinin Üretimi ve Enzim Aktivitelerinin Belirlenmesi, 2011 - 2013

Scientific Refereeing

Sensor Review, SCI Journal, October 2014

Metrics

Publication: 69

Citation (WoS): 150

Citation (Scopus): 225

H-Index (WoS): 6

H-Index (Scopus): 9