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Personal Information

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International Researcher IDs

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Education

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji ve Genetik Anabilim Dalı, Turkey 2020 - 2023

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji ve Genetik Anabilim Dalı, Turkey 2017 - 2020

Undergraduate, Marmara University, Faculty Of Engineering, Bioengineering, Turkey 2011 - 2016

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Lokal izolatların 2,3-bütandiol üretme potansiyellerinin araştırılması, Ataturk University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji ve Genetik Anabilim Dalı, 2023

Postgraduate, UTILISATION of BAKLAVA WASTES IN THE MICROBIAL PRODUCTION of CITRIC ACID, ETHYL ALCOHOL, POLYSACCHARIDE and PIGMENT, Ataturk University, Fen Bilimleri Enstitüsü, Moleküler Biyoloji ve Genetik Anabilim Dalı, 2020

Research Areas

Biotechnology, Microbiology

Academic Positions

Assistant Professor, Ataturk University, Fen Fakültesi, Moleküler Biyoloji ve Genetik, 2024 - Continues
Research Assistant, Ataturk University, Fen Fakültesi, Moleküler Biyoloji ve Genetik, 2019 - 2024

Courses

Undergraduate

Temel Mikrobiyoloji Laboratuvarı, Undergraduate, 2022 - 2023

Biotechnology Laboratory, Undergraduate, 2022 - 2023

Biyokimya Laboratuvarı, Undergraduate, 2022 - 2023

Temel Genetik Laboratuvarı, Undergraduate, 2022 - 2023

Genetik Mühendisliği Laboratuvarı, Undergraduate, 2022 - 2023

Moleküler Biyolojide Kullanılan Yöntemler I Laboratuvarı, Undergraduate, 2022 - 2023

Journal articles indexed in SCI, SSCI, and AHCI

- I. **Biodegradation of Benzophenone-3 in Non-Sterile Culture Process Using *< i> Klebsiella huaxiensis</i>* W2**
ÖMEROĞLU M. A., BAKAN B., BALTACI M. Ö., Arslan N. P., UÇAR S., Elmas S., ADIGÜZEL A., TAŞKIN M.
WATER AIR AND SOIL POLLUTION, vol.236, no.2, 2025 (SCI-Expanded)
- II. **Eco-friendly synthesis of silver nanoparticles using lignin peroxidase produced from *Caldibacillus thermoamylorovans* and cultivated on waste walnut shell**
Akkaya S. N., Almansour A., ÖMEROĞLU M. A., NADAROĞLU H., ADIGÜZEL A.
FEMS Microbiology Letters, vol.372, 2025 (SCI-Expanded)
- III. **Turning waste into biofuel: Non-sterile fermentation of molasses using immobilized cells of *Bacillus licheniformis* BD43 for efficient 2,3-Butanediol production**
ÖMEROĞLU M. A., BALTACI M. Ö., TAŞKIN M., ADIGÜZEL A.
Industrial Crops and Products, vol.211, 2024 (SCI-Expanded)
- IV. **Determination of foodborne pathogens in minced beef by real-time PCR without culture enrichment**
Turanoglu B., Omeroglu M. A., Baltaci M. Ö., Adiguzel G., Adiguzel A.
JOURNAL OF MICROBIOLOGICAL METHODS, vol.219, 2024 (SCI-Expanded)
- V. **Enhanced biodegradation of crude oil contamination by indigenous bacterial consortium under real conditions**
BALTACI M. Ö., ÖMEROĞLU M. A., ÖZKAN H., TAŞKIN M., ADIGÜZEL A.
BIOCATALYSIS AND BIOTRANSFORMATION, vol.42, no.1, pp.56-67, 2024 (SCI-Expanded)
- VI. **Anoxybacillus: an overview of a versatile genus with recent biotechnological applications**
Omeroglu M. A., Baltaci M. Ö., Adiguzel A.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.39, no.6, 2023 (SCI-Expanded)
- VII. **Evaluation of wool protein hydrolysate as peptone for production of microbial enzymes**
Ömeroğlu M. A., Albayrak Ş., Arslan N. P., Özkan H., Adığuzel A., Taşkin M.
3 Biotech, vol.13, no.1, 2023 (SCI-Expanded)
- VIII. **Production of Endoglucanase by *Exiguobacterium mexicanum* OB24 Using Waste Melon Peels as Substrate**
BALTACI M. Ö., ÖMEROĞLU M. A., ALBAYRAK Ş., Adiguzel G., ADIGÜZEL A.
ANAIS DA ACADEMIA BRASILEIRA DE CIENCIAS, vol.94, 2022 (SCI-Expanded)
- IX. **Co-production of Amylase and Protease by Locally Isolated Thermophilic Bacterium *< i> Anoxybacillus rupiensis</i>* T2 in Sterile and Non-sterile Media Using Waste Potato Peels as Substrate**
Tuysuz E., Gonul-Baltaci N., Ömeroğlu M. A., Adığuzel A., Taşkin M., Özkan H.
WASTE AND BIOMASS VALORIZATION, no.12, pp.6793-6802, 2020 (SCI-Expanded)
- X. **Genome-based classification of *Calidifontibacillus erzurumensis* gen. nov., sp. nov., isolated from a hot spring in Turkey, with reclassification of *Bacillus azotoformans* as *Calidifontibacillus azotoformans* comb. nov. and *Bacillus oryziterrae* as *Calidifontibacillus oryziterrae* comb. nov.**
Adiguzel A., Ay H., Baltaci M. Ö., Akbulut S., Albayrak Ş., Omeroglu M. A.
INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY, vol.70, no.12, pp.6418-6427, 2020 (SCI-Expanded)
- XI. ***Bacillus pasinlerensis* sp. nov., a thermophilic bacterium isolated from a hot spring in Turkey**

Baltaci M. Ö., Ay H., Akbulut S., Adiguzel G., Albayrak Ş., Omeroglu M. A., Ozkan H., Taskin M., Adiguzel A.
INTERNATIONAL JOURNAL OF SYSTEMATIC AND EVOLUTIONARY MICROBIOLOGY, vol.70, no.6, pp.3865-3871,
2020 (SCI-Expanded)

Articles Published in Other Journals

- I. **Rapid Detection of Listeria monocytogenes In Chicken Meat By Real-time PCR without Culture Enrichment**
BİLGİN E., ÖMEROĞLU M. A., BALTACI M. Ö., ÇANAKÇI ADIGÜZEL G., ADIGÜZEL A.
JOURNAL OF PURE AND APPLIED MICROBIOLOGY, vol.18, 2024 (ESCI)
- II. **Microbial conversion of waste baklava syrup to biofuels and bioproducts**
ÖMEROĞLU M. A., Gonul-Baltaci N., Arslan N. P., ADIGÜZEL A., TAŞKIN M.
BIOCATALYSIS AND AGRICULTURAL BIOTECHNOLOGY, vol.42, 2022 (ESCI)
- III. **Bacteriocin Producing Bacteria Isolated from Turkish Traditional Sausage Samples**
Erkaya E., Genç B., Arslan S., Çanakçı Adıgüzel G., Ömeroğlu M. A., Özkan H., Adıgüzel A.
JOURNAL OF PURE AND APPLIED MICROBIOLOGY, vol.14, no.2, pp.1567-1576, 2020 (ESCI)

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Microbial Based Products: Exopolysaccharides**
Ömeroğlu M. A.
AVRASYA 11th INTERNATIONAL CONFERENCE ON APPLIED SCIENCES , Toskent, Uzbekistan, 1 - 05 August 2024, pp.199-205, (Full Text)
- II. **Utilisation of Waste Cooking Oil in the Production of Citric Acid by Yarrowia lipolytica PK7**
Ömeroğlu M. A.
EGE 11TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES , İzmir, Turkey, 1 - 03 June 2024, pp.108-111, (Full Text)
- III. **Production of Amylase from Aeribacillus pallidus A07 using Potato Peel Powder**
Ömeroğlu M. A., Albayrak Ş., Baltacı M. Ö., Adıgüzel A.
second international congress on biological and health sciences, Afyonkarahisar, Turkey, 24 - 27 February 2022, pp.219-224, (Full Text)
- IV. **Bioethanol Production**
Ömeroğlu M. A., Baltacı M. Ö., Özkan H., Adıgüzel A.
1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021), Erzurum, Turkey, 10 - 12 September 2021, pp.312-318, (Full Text)
- V. **Molecular Characterization of Thermophilic Bacteria and Investigation of Their Potential to Produce Biotechnologically Important Enzymes**
ÖMEROĞLU M. A., BALTACI M. Ö., ALBAYRAK Ş., ÖZKAN H., ADIGÜZEL A.
2nd INTERNATIONAL CONFERENCE ON FOOD, AGRICULTURE AND ANIMAL SCIENCES, 8 - 11 November 2019, (Summary Text)
- VI. **Molecular Characterization of Lactic Acid Bacteria from Cheese Samples**
ARSLAN S., ÖMEROĞLU M. A., BALTACI M. Ö., ÇANAKÇI ADIGÜZEL G., TAŞKIN M., ADIGÜZEL A.
2nd INTERNATIONAL CONFERENCE ON FOOD, AGRICULTURE AND ANIMAL SCIENCES, 8 - 11 November 2019, (Summary Text)
- VII. **Molecular Characterization of Bacteria which is Capable of Producing Biodiesel**
ALBAYRAK Ş., ÖMEROĞLU M. A., BALTACI M. Ö., TAŞKIN M., ADIGÜZEL A.
Natural2019, Ankara, Turkey, 2 - 06 October 2019, pp.198-203, (Summary Text)
- VIII. **Molecular Characterization of Bacteria which is Capable of Producing Biodiesel**
Seyda A., Ömeroğlu M. A., Baltacı M. Ö., Taşkin M., Adıgüzel A.

Funded Projects

ÇANAKÇI ADIGÜZEL G., ADIGÜZEL A., BALTACI M. Ö., AKBULUT S., ALBAYRAK Ş., ÖMEROĞLU M. A., Project Supported by Higher Education Institutions, Rumenden izole edilen ve Clostridium cinsine ait yeni bir tür olan CX1 suşunun Polifazik Karakterizasyonu, 2022 - 2025

ERDOĞAN O., ADIGÜZEL A., ŞİŞMAN T., AŞKIN H., ŞİŞECİOĞLU M., BUDAK H., ÖZKAN H., ÜNVER Y., CEYLAN H., KARAMAN M., et al., Project Supported by Higher Education Institutions, Moleküler Biyoloji ve Genetik Bölümü Araştırma Altyapısının geliştirilmesi, 2023 - 2024

ERDOĞAN O., YILMAZ A., ÖMEROĞLU M. A., ADIGÜZEL A., ŞİŞMAN T., ŞİŞECİOĞLU M., BUDAK H., ÖZKAN H., AŞKIN H., ÜNVER Y., et al., Project Supported by Higher Education Institutions, Moleküler Biyoloji ve Genetik Bölümü Kanser Araştırma Laboratuvarı Araştırma Altyapısının Desteklenmesi, 2022 - 2023

Baltacı M. Ö., Adigüzel A., Albayrak Ş., Ömeroğlu M. A., Project Supported by Higher Education Institutions, Atık materyallerden mikrobiyal ekzopolisakkart üretimi, 2022 - 2023

ADIGÜZEL A., ERDOĞAN O., ÜNVER Y., CEYLAN H., YILDIZ M., KARADAYI G., ANAKÖK Ö. F., YILMAZ A., BALTACI M. Ö., AKBULUT S., et al., Project Supported by Higher Education Institutions, Moleküler Biyoloji ve Genetik Bölümünün Laboratuvar İmkanlarının ve Akademik Araştırma Potansiyelinin Geliştirilmesi, 2020 - 2022

Tuysuz E., Özkan H., Baltacı M. Ö., Ömeroğlu M. A., Project Supported by Other Official Institutions, I'm Learning With Fun I'm Developing, 2021 - 2021

BALTACI M. Ö., ÇANAKÇI ADIGÜZEL G., ALBAYRAK Ş., ADIGÜZEL A., ÖMEROĞLU M. A., Project Supported by Higher Education Institutions, Çiğ tavuk örneklerinde bulunan patojenik bakterilerin Real Time PCR yöntemi ile tespiti, 2020 - 2021

ADIGÜZEL A., BEYHAN A., FESCİOĞLU S., BALTACI M. Ö., ÖMEROĞLU M. A., Project Supported by Higher Education Institutions, Gereksiz antibiyotik kullanımının zararları, 2019 - 2020

Roles in Event Organizations

Kalecik S., Sarıtaş S., Kılıç D., Ünver Y., Nişancı B., Toraman E., Ömeroğlu M. A., Orak T., Taş S., Levet A., et al., 1st International Symposium On Recent Advances In Fundamental And Applied Sciences (Isfas-2021), Scientific Congress, Erzurum, Turkey, Eylül 2021

Kalecik S., Sarıtaş S., Ünver Y., Nişancı B., Bayrakçekeen Nişancı F., Karaman M., Ömeroğlu M. A., Orak T., Albayrak Ş., Saraç Y., et al., 1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021) , Scientific Congress, Erzurum, Turkey, Eylül 2021

Metrics

Publication: 22

Citation (WoS): 59

Citation (Scopus): 87

H-Index (WoS): 5

H-Index (Scopus): 5

Congress and Symposium Activities

Second International Congress on Biological and Health Sciences, Attendee, Afyonkarahisar, Turkey, 2022

1st INTERNATIONAL SYMPOSIUM ON RECENT ADVANCES IN FUNDAMENTAL AND APPLIED SCIENCES (ISFAS-2021), Session Moderator, Erzurum, Turkey, 2021

1st INTERNATIONAL CONGRESS ON NATURAL SCIENCES (ICNAS-2021), Attendee, Erzurum, Turkey, 2021

2ND INTERNATIONAL CONFERENCE ON FOOD, AGRICULTURE AND ANIMAL SCIENCES , Attendee, Antalya, Turkey, 2019