

Assoc. Prof. HASAN BUĞRA ÇOBAN

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-8131-2019

ScopusID: 56113914300

Yoksis Researcher ID: 279234

Education

Associate Degree, Anadolu University, Açıköğretim Fakültesi, Aşçılık, Turkey 2022 - 2024

Undergraduate, Anadolu University, Open Education Faculty, Department Of Sociology, Turkey 2018 - 2022

Doctorate, Pennsylvania State University, Engineering, Agricultural And Biological Engineering Department, United States Of America 2011 - 2014

Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Biyomühendislik (Yl) (Tezli), Turkey 2007 - 2009

Undergraduate, Ege University, Faculty Of Engineering, Biyomühendislik Bölümü, Turkey 2001 - 2007

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, Production of phenylpyruvic acid and phytase by microbial fermentation, Pennsylvania State University, Agricultural And Biological Engineering Department, 2014

Postgraduate, Zeytin karasuyundan mikrobiyal lipaz üretimi, Ege University, Fen Bilimleri Enstitüsü, Biyomühendislik (Yl) (Tezli), 2009

Research Areas

Health Sciences, Natural Sciences, Engineering and Technology

Academic Positions

Associate Professor, Dokuz Eylül University, İzmir Uluslararası Biyotip ve Genom Enstitüsü, Genom Bilimleri ve Moleküler Biyoteknoloji Anabilim Dalı, 2023 - Present

Lecturer, Dokuz Eylül University, İzmir Uluslararası Biyotip ve Genom Enstitüsü, Genom Bilimleri ve Moleküler

Academic and Administrative Experience

Assistant Director of the Institute, Dokuz Eylül University, İzmir Uluslararası Biyotip ve Genom Enstitüsü, 2020 - Present

Courses

Postgraduate

PROTEİN BİOCHEMİSTRY AND BİOTECHNOLOGY, Postgraduate, 2020 - 2021, 2019 - 2020, 2017 - 2018

SEMİNAR, Postgraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019

INTRODUCTION TO BIOPROCESS ENGINEERING, Postgraduate, 2020 - 2021

Jury Memberships

Post Graduate, Post Graduate, İzmir Yüksek Teknoloji Enstitüsü, July, 2025

Competition, Özel Ege Lisesi Araştırma Projeleri, May, 2025

Post Graduate, Post Graduate, Gebze Teknik Üniversitesi, March, 2024

Journal articles indexed in SCI, SSCI, and AHCI

- I. Optimization and modeling of production and partial characterization of protease from *Bacillus licheniformis* NRS 1264
Sayin O., ÇOBAN H. B.
Journal of Chemical Technology and Biotechnology, 2025 (SCI-Expanded)
- II. Optimization of biotransformation processes of *Camarosporium laburnicola* to improve production yields of potent telomerase activators
Küçüksolak M., Çoban H. B., Bedir E.
MICROBIAL CELL FACTORIES, vol.23, no.196, pp.196-211, 2024 (SCI-Expanded)
- III. Investigation of the inhibitory effects of furfural and hydroxymethylfurfural on the production of *Aspergillus niger* inulinase and modeling of the process
Gurler H. N., ÇOBAN H. B., TURHAN İ.
BIOMASS CONVERSION AND BIOREFINERY, vol.13, 2023 (SCI-Expanded)
- IV. Evaluation of the inhibitory effect of 5-hydroxymethylfurfural (HMF) on ethanol fermentation by using immobilized *Saccharomyces cerevisiae* in stirred-tank bioreactor and mathematical modeling
Erkan S. B., Cioban H. B., TURHAN İ.
FUEL, vol.317, 2022 (SCI-Expanded)
- V. Production of protease with *Bacillus megaterium* DSM32: Partial characterisation of the enzyme and modelling of the production
Çoban H. B.
ACTA ALIMENTARIA, vol.51, no.2, pp.228-240, 2022 (SCI-Expanded)
- VI. Evaluation of various mathematical models for cell growth and high bioconversion potent protease production of *Microbacterium* sp. in shake flask fermentations
ÇOBAN H. B.
BIOMASS CONVERSION AND BIOREFINERY, vol.12, no.4, pp.1353-1359, 2022 (SCI-Expanded)
- VII. Partial purification and characterization of a recombinant beta-mannanase from *Aspergillus fumigatus* expressed in *Aspergillus sojae* grown on carob extract
Karalahil E., Germec M., KARAOĞLAN M., YATMAZ E., ÇOBAN H. B., İNAN M., TURHAN İ.

- BIOMASS CONVERSION AND BIOREFINERY, vol.10, no.4, pp.1189-1205, 2020 (SCI-Expanded)
- VIII. **Organic acids as antimicrobial food agents: applications and microbial productions**
ÇOBAN H. B.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.43, no.4, pp.569-591, 2020 (SCI-Expanded)
- IX. **Partial purification and characterization of a recombinant β -mannanase from Aspergillus fumigatus expressed in Aspergillus sojae grown on carob extract**
Karahalil E., Germeç M., Karaoglan M., Yatmaz E., Çoban H. B., İnan M., Turhan İ.
BIOMASS CONVERSION AND BIOREFINERY, vol.10, pp.1189-1205, 2019 (SCI-Expanded)
- X. **A current approach to the control of filamentous fungal growth in media: microparticle enhanced cultivation technique**
Karahalil E., ÇOBAN H. B., TURHAN İ.
CRITICAL REVIEWS IN BIOTECHNOLOGY, vol.39, no.2, pp.192-201, 2019 (SCI-Expanded)
- XI. **Optimization of dilute acid pretreatment of barley husk and oat husk and determination of their chemical composition**
Demirel F., Germec M., ÇOBAN H. B., TURHAN İ.
CELLULOSE, vol.25, no.11, pp.6377-6393, 2018 (SCI-Expanded)
- XII. **Phytase as a Diet Ingredient: From Microbial Production to Its Applications in Food and Feed Industry**
ÇOBAN H. B., Demirci A.
MICROBIAL PRODUCTION OF FOOD INGREDIENTS AND ADDITIVES, vol.5, pp.33-55, 2017 (SCI-Expanded)
- XIII. **Applied Research Perspectives of Alpha-Keto Acids: From Production to Applications**
ÇOBAN H. B., Demirci A.
FOOD BIOSYNTHESIS, VOL 1, pp.427-447, 2017 (SCI-Expanded)
- XIV. **ENHANCED PHENYL PYRUVIC ACID PRODUCTION WITH PROTEUS VULGARIS BY OPTIMIZING OF THE FERMENTATION MEDIUM**
ÇOBAN H. B., Demirci A., Patterson P. H., Elias R. J.
ACTA ALIMENTARIA, vol.45, no.1, pp.1-10, 2016 (SCI-Expanded)
- XV. **Enhancement and modeling of microparticle-added Rhizopus oryzae lactic acid production**
ÇOBAN H. B., Demirci A.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.39, no.2, pp.323-330, 2016 (SCI-Expanded)
- XVI. **Enhanced phenylpyruvic acid production with Proteus vulgaris in fed-batch and continuous fermentation**
ÇOBAN H. B., Demirci A., Patterson P. H., Elias R. J.
PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY, vol.46, no.2, pp.157-160, 2016 (SCI-Expanded)
- XVII. **IMPROVED SUBMERGED ASPERGILLUS FICUUM PHYTASE PRODUCTION IN BENCH-TOP BIOREACTORS BY OPTIMIZATION OF FERMENTATION MEDIUM**
ÇOBAN H. B., Demirci A.
ACTA ALIMENTARIA, vol.44, no.4, pp.549-560, 2015 (SCI-Expanded)
- XVIII. **Enhanced Aspergillus ficuum phytase production in fed-batch and continuous fermentations in the presence of talcum microparticles**
ÇOBAN H. B., Demirci A., TURHAN İ.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.38, no.8, pp.1431-1436, 2015 (SCI-Expanded)
- XIX. **Microparticle-enhanced Aspergillus ficuum phytase production and evaluation of fungal morphology in submerged fermentation**
ÇOBAN H. B., Demirci A., TURHAN İ.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.38, no.6, pp.1075-1080, 2015 (SCI-Expanded)
- XX. **Enhanced submerged Aspergillus ficuum phytase production by implementation of fed-batch fermentation**
ÇOBAN H. B., Demirci A.
BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.37, no.12, pp.2579-2586, 2014 (SCI-Expanded)
- XXI. **Screening of phenylpyruvic acid producers and optimization of culture conditions in bench scale**

bioreactors

ÇOBAN H. B., Demirci A., Patterson P. H., Elias R. J.

BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.37, no.11, pp.2343-2352, 2014 (SCI-Expanded)

XXII. Screening of phytase producers and optimization of culture conditions for submerged fermentation

ÇOBAN H. B., Demirci A.

BIOPROCESS AND BIOSYSTEMS ENGINEERING, vol.37, no.4, pp.609-616, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. **Modification of Aspergillus niger ATCC 11414 Growth For The Enhancement of Protease Production By The Effect Of Natural Microparticles**
Çoban H. B.
Middle East Journal of Science, vol.8, no.2, pp.99-105, 2022 (Peer-Reviewed Journal)
- II. **Axinella damicornis süngerinden izole edilen sucul bakterilerin proteaz üretkenliklerinin araştırılması ve üretilen proteaz enziminin kısmi karakterizasyonu**
ÇOBAN H. B.
Mediterranean Agricultural Sciences, vol.33, no.2, pp.223-229, 2020 (Peer-Reviewed Journal)

Books

- I. **Phytase as a Diet Ingredient: From Microbial Production to Its Applications in Food and Feed Industry**
Çoban H. B., Demirci A.
in: Microbial Production of Food Ingredients and Additives, Alina Maria Holban,Alexandru Mihai Grumezescu, Editor, Academic Press , Massachusetts, pp.33-55, 2017
- II. **Applied Research Perspectives of Alpha-Keto Acids: From Production to Applications**
Çoban H. B., Demirci A.
in: Food Biosynthesis, Alexandru Mihai Grumezescu,Alina Maria Holban, Editor, Academic Press , Massachusetts, pp.427-447, 2017

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Reducing the Amount of Caffeine in Coffee by Fermentation**
ÇOBAN H. B.
13th International Scientific Research Congress (UBAK), Ankara, Turkey, 12 March 2022, (Summary Text)
- II. **Doğal mikropartiküllerin hücresel büyümeye morfolojisine etkisi ile fungal proteaz üretiminin iyileştirilmesi**
ÇOBAN H. B.
6. Uluslararası Akademik Araştırmalar Kongresi'ne (ICAR), Turkey, 23 August 2021, (Summary Text)
- III. **Mathematical modeling of protease production by *Microbacterium arborescens* and statical evaluation of model predictions**
ÇOBAN H. B.
IV. International Icontech Symposium on Innovative Surveys in Positive Science, Turkey, 18 July 2021, (Summary Text)
- IV. **Investigation of protease productivity of marine bacteria isolated from Axinella damicornis sponge and partial characterization of produced protease**
ÇOBAN H. B.
International Eurasian Conference on Biotechnology and Biochemistry, Turkey, 16 - 18 December 2020,

- (Summary Text)
- V. **MAKÜLER KORNEA DİSTROFİSİNİN TEDAVİSİNDE KULLANILMAK ÜZERE MMP-1 VE MMP-13'xxÜN REKOMBİNANT ÜRETİMİ**
kaya s. g., ÇOBAN H. B., YILDIRIM C. A., kalyoncu s.
V. Türkiye in Vitro Diyagnostik Sempozyumu: Sağlık Biyoteknolojisi, Turkey, 19 - 21 February 2020, (Summary Text)
- VI. **Conversion of phenylalanine to phenylpyruvic acid by microbial fermentation**
ÇOBAN H. B., Demirci A., Patterson P., Elias R.
Society of Industrial Microbiology and Biotechnology Annual Meeting, United States Of America, 24 July 2014, (Summary Text)
- VII. **Production of phytase by microbial submerged fermentation and optimization of process conditions**
ÇOBAN H. B., Demirci A.
Society of Industrial Microbiology and Biotechnology Annual Meeting, Aydin, Turkey, 11 August 2013, (Summary Text)

Funded Projects

Çoban H. B., Bedir E., Karaman O., TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Bazı Potent Telomeraz Aktivatörlerinin Fungal Biyotransformasyon ile Üretimine Yönelik Proseslerin Optimizasyonu, Transformasyondan Sorumlu Enzimlerin Elde Edilmesi ve Karakterizasyonu, Üretilen Moleküllerin RejeneratifTİpta Kullanım Potansiyellerinin Araştırılması, 2020 - 2024

Çoban H. B., Uslu G., Yakişan R., Karataş A., Vural M. E., Akça N., Keskin B., Kaplan Bilmez Y., Han Y., TAGEM Tarımsal Araştırmalar ve Politikalar Genel Müdürlüğü Projesi, İpek Üretim Tesisi nde Atık Sularından ve Koza Çepezlerinden İpek Proteini Serisinin Elde Edilmesi ve Ekonomik Yonden Değerlendirilmesi, 2021 - 2023

ÇOBAN H. B., Project Supported by Higher Education Institutions, BAP Other, Proteaz enziminin bakteriyel kaynaklı üretiminin optimizasyonu, kısmi saflaştırması ve modellenmesi (hastane önlük ve çarşaflarının temizliğinde kullanılan deterjanların içeriğinde bulunan proteaz enziminin üretimi için ön çalışma), 2021 - 2022

Çoban H. B., Yıldırım C. A., BAĞRIYANIK H. A., GÜVEN S., KALYONCU UZUNLAR S., TUBITAK Project, 1003 - Priority Areas R&D Projects Support Program, Maküler Kornea Distrofisi için yeni bir topikal tedavi yönteminin geliştirilmesi, 2019 - 2022

Metrics

Publication: 33
Citation (WoS): 454
Citation (Scopus): 494
H-Index (WoS): 10
H-Index (Scopus): 10

Congress and Symposium Activities

6. Uluslararası Akademik Araştırmalar Kongresi'ne (ICAR), Attendee, Elazığ, Turkey, 2021
IV. International Icontech Symposium on Innovative Surveys in Positive Science, Attendee, Adana, Turkey, 2021
BioTechBioChem 2020, Attendee, Ankara, Turkey, 2020

Scholarships

YLSY, Ministry of Education, 2009 - 2014

