

Prof. ALİ FAZIL YENİDÜNYA

Personal Information

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International Researcher IDs

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Education Information

Doctorate, University of London-Kings College London, United Kingdom 1989 - 1992

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Sivas Cumhuriyet University, Fen Fakültesi, Moleküler Biyoloji Ve Genetik Bölümü, 2005 - Continues

Academic and Administrative Experience

Head of Department, Sivas Cumhuriyet University, Fen Fakültesi, Moleküler Biyoloji ve Genetik Bölümü, 2005 - 2008

Courses

Moleküler Mikrobiyoloji, Undergraduate, 2018 - 2019

Seminer Dersi, Postgraduate, 2018 - 2019

Bitirme Tezi, Undergraduate, 2019 - 2020

Mesleki İngilizce I, Undergraduate, 2019 - 2020

Mesleki İngilizce II, Undergraduate, 2018 - 2019

Moleküler Hücre Biyolojisi - I, Undergraduate, 2019 - 2020

Uzmanlık Alan Dersi, Postgraduate, 2019 - 2020

Uzmanlık Alan Dersi, Doctorate, 2017 - 2018

Temel Mikrobiyoloji, Undergraduate, 2018 - 2019

Rekombinant DNA Teknolojisi, Postgraduate, 2018 - 2019

İnsan Gen. ve Kanser Biyolojisi, Undergraduate, 2018 - 2019

Laboratuarda Evrim, Undergraduate, 2017 - 2018

Laboratuarda Yönlendirilmiş Evrim, Postgraduate, 2018 - 2019

Endüstriyel Farmasötik Biyoteknoloji ve Uygulama Alanları, Doctorate, 2016 - 2017

Gen ve Protein Evrimi, Doctorate, 2017 - 2018
Seminer Dersi, Doctorate, 2016 - 2017
Biyoteknoloji - II, Undergraduate, 2016 - 2017
Biyoteknoloji - I, Undergraduate, 2016 - 2017
İmmünoloji, Doctorate, 2013 - 2014
Uzmanlık Alan Dersi, Doctorate, 2013 - 2014
Tıbbi Biyoloji Ve Genetik, Associate Degree, 2009 - 2010
Tıbbi Biyoloji ve Genetik I, Undergraduate, 2010 - 2011
Moleküler Biyoloji ve Genetiğe Giriş I, Undergraduate, 2007 - 2008

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Removal of lead ions (Pb²⁺) from aqueous solution using chitosan/starch composite material: Experimental and density functional theory findings**
Çelik M. S., ÇAYLAK O., KÜTÜK N., YENİDÜNYA A. F., ÇETİNKAYA S., Maslov M. M., BATIR G. G.
Biomass Conversion and Biorefinery, 2024 (SCI-Expanded)
- II. **Immobilization of pectinase on chitosan-alginate-clay composite beads: Experimental, DFT and molecular docking studies**
Aksu A., Çetinkaya S., Fazıl Yenidünya A. F., Akkuş Çetinus Ş., Gezegen H., Tüzün B.
Journal of Molecular Liquids, vol.390, 2023 (SCI-Expanded)
- III. **Biosorption of Rhodamine B dye from aqueous solution by Rhus coriaria L. plant: Equilibrium, kinetic, thermodynamic and DFT calculations**
Çelik M. S., Çetinus Ş., Yenidünya A. F., Çetinkaya S., Tüzün B.
Journal of Molecular Structure, vol.1272, 2023 (SCI-Expanded)
- IV. **Biosorption of lead ions (Pb²⁺) from water samples using dried Lemna minor biomass: experimental and density functional theory studies**
KAYA S., ÇETİNKAYA S., Jalbani N. S., YENİDÜNYA A. F., KÜTÜK N., KASAKA E., Maslov M. M.
Biomass Conversion and Biorefinery, 2023 (SCI-Expanded)
- V. **Removal of Erythrosine B dye from wastewater by Penicillium italicum: experimental, DFT, and molecular docking studies**
ÇETİNKAYA S., Eyupoglu V., ÇETİNTAŞ H. İ., YENİDÜNYA A. F., KEBABCI Ö., TÜZÜN B.
Journal of Biomolecular Structure and Dynamics, vol.41, no.23, pp.14212-14223, 2023 (SCI-Expanded)
- VI. **Removal of safranin O from wastewater using Streptomyces griseobrunneus dead biomass and in silico calculations**
Çelik M. S., KÜTÜK N., YENİDÜNYA A. F., ÇETİNKAYA S., TÜZÜN B.
Biomass Conversion and Biorefinery, 2023 (SCI-Expanded)
- VII. **Tromethamine and dodecanol appear to be the major secondary metabolites of Streptomyces decoyicus M***
Çelik M. S., Aksu A., YENİDÜNYA A. F., ÇETİNKAYA S.
ARCHIVES OF MICROBIOLOGY, vol.204, no.8, 2022 (SCI-Expanded)
- VIII. **Epichlorohydrin and tripolyphosphate-crosslinked chitosan-kaolin composite for Auramine O dye removal from aqueous solutions: Experimental study and DFT calculations**
HASDEMİR Z. M., ÇETİNKAYA S., YENİDÜNYA A. F., Başoğlu-Ünal F., Ece A.
International Journal of Biological Macromolecules, vol.199, pp.318-330, 2022 (SCI-Expanded)
- IX. **Esterification of Fructose-oleic Acid by tert-Butanol/Dimethyl Sulfoxide and by 2-Methyl-2-butanol/Dimethyl Sulfoxide.**
ÇETİNKAYA S., YENİDÜNYA A. F., Basoglu F., Polat Z., Savas S.
Journal of oleo science, vol.69, no.10, pp.1281-1285, 2020 (SCI-Expanded)
- X. **Synthesis of Ribose - Oleic Acid Esters in the Presence- and Absence of Candida antarctica Lipase B**
Çetinkaya S., Yenidünya A. F., Başoğlu F., Saraç K.

Journal Of Oleo Science, vol.69, no.8, pp.907-912, 2020 (SCI-Expanded)

- XI. **Secondary Metabolites of an of Streptomyces griseorubens Isolate Are Predominantly Pyrrole- and Linoleic-acid like Compounds**
Çetinkaya S., Yenidünya A. F., Arslan K., Arslan D., Doğan Ö., Daştan T.
JOURNAL OF OLEO SCIENCE, vol.69, no.10, pp.1273-1280, 2020 (SCI-Expanded)
- XII. **D-Glucose-fatty Acid Ester Synthesis with or without a Biocatalyst in the Same Organic Media**
ÇETİNKAYA S., YENİDÜNYA A. F., Basoglu F., Sarac K.
JOURNAL OF OLEO SCIENCE, vol.69, no.7, pp.737-742, 2020 (SCI-Expanded)
- XIII. **Production, purification, and characterization of metalloprotease from Candida kefyr 41 PSB**
Yavuz S., KOCABAY S., ÇETİNKAYA S., AKKAYA B., AKKAYA R., YENİDÜNYA A. F., BAKICI M. Z.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.94, pp.106-113, 2017 (SCI-Expanded)
- XIV. **Characterization of thermostable beta-amylase isozymes from Lactobacillus fermentum**
KOCABAY S., ÇETİNKAYA S., AKKAYA B., YENİDÜNYA A. F.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.93, pp.195-202, 2016 (SCI-Expanded)
- XV. **High genetic and phenotypic variability of Streptococcus thermophilus strains isolated from artisanal Yuruk yoghurts**
Erkus O., Okuklu B., YENİDÜNYA A. F., Harsa S.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.58, no.2, pp.348-354, 2014 (SCI-Expanded)
- XVI. **Cytotoxicity of three maleic anhydride copolymers and common solvents used for polymer solvation**
KARAKUŞ G., Zengin H., Polat Z., YENİDÜNYA A. F., Aydin S.
POLYMER BULLETIN, vol.70, no.5, pp.1591-1612, 2013 (SCI-Expanded)
- XVII. **Synthesis, characterization and cytotoxicity of novel modified poly[(maleic anhydride)-co-(vinyl acetate)]/noradrenaline conjugate**
KARAKUŞ G., Polat Z., YENİDÜNYA A. F., Zengin H., Karakus C. B.
POLYMER INTERNATIONAL, vol.62, no.3, pp.492-500, 2013 (SCI-Expanded)
- XVIII. **Synthesis, characterization, and assessment of cytotoxic, antiproliferative, and antiangiogenic effects of a novel procainamide hydrochloride-poly(maleic anhydride-co-styrene) conjugate.**
KARAKUŞ G., Polat Z., YAĞLIOĞLU A. Ş., KARAHAN M., YENİDÜNYA A. F.
Journal of biomaterials science. Polymer edition, vol.24, no.10, pp.1260-76, 2013 (SCI-Expanded)
- XIX. **Production and immobilization of a novel thermoalkalophilic extracellular amylase from bacilli isolate**
AKKAYA B., YENİDÜNYA A. F., AKKAYA R.
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.50, no.4, pp.991-995, 2012 (SCI-Expanded)
- XX. **Properties of an extracellular lipase from a traditional yoghurt yeast**
AKKAYA B., YENİDÜNYA A. F.
TURKISH JOURNAL OF BIOCHEMISTRY-TURK BIYOKIMYA DERGISI, vol.37, no.1, pp.62-67, 2012 (SCI-Expanded)
- XXI. **Modification of Maleic Anhydride-Styrene Copolymer with Noradrenaline by Chemical and Enzymatic Methods**
KARAKUŞ G., YENİDÜNYA A. F., Zengin H., Polat Z.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.122, no.4, pp.2821-2828, 2011 (SCI-Expanded)
- XXII. **Amoebicidal Effect of Poly Maleic Anhydride Co Vinyl Acetate Copolymer on Entamoeba Histolytica Trophozoites**
KARAKUŞ G., YENİDÜNYA A. F., Zengin H. B., MALATYALI E., ÖZÇELİK S.
Medicinal Chemistry, vol.1, no.1, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **Purification and characterization of 1-dodecanol from an isolate of Streptomyces viridodiataticus**
ÇETİNKAYA S., YENİDÜNYA A. F., AKSU A., ÇELİK M. S.
Biocatalysis and Agricultural Biotechnology, vol.34, 2021 (ESCI)

II. An investigation of the probiotic properties of *Lactobacillus fermentum*

ÇETİNKAYA S., KOCABAY S., YENİDÜNYA A. F.

International Journal of Life Sciences and Biotechnology, vol.3, no.2, pp.180-190, 2020 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Omicron: Emergence, Detection, and Response**
ÇETİNKAYA S., ÖZBİLÜM ŞAHİN N., YENİDÜNYA A. F., TÜZÜN B.
in: Advances in Health and Disease, Duncan, Lowell T., Editor, Nova Science Publishers, New York, pp.161-197, 2023
- II. **BIOLOGY OF NATURAL AND SYNTHETIC LANTIBIOTICS AND THEIR CURRENT APPLICATION STATUS**
YENİDÜNYA A. F., ÇETİNKAYA S.
in: DEPTHS OF SCIENCE, YÜCEL, Cenk, Editor, İksad publishing house, Ankara, pp.91-121, 2022
- III. **CRISPR/CAS IMMUNE SYSTEM WITH ITS MECHANISM, APPLICATIONS AND ETHICS ASSESSMENT**
KEBABCİ Ö., YENİDÜNYA A. F.
in: DEPTHS OF SCIENCE, Cenk YÜCEL, Editor, İksad Publications, Ankara, pp.39-74, 2022
- IV. **GENETIC INTERPLAY BETWEEN THE DAIRY STREPTOCOCCUS THERMOPHILUS AND ITS PHAGES**
ÇETİNKAYA S., YENİDÜNYA A. F.
in: RECENT ADVANCES IN BIOLOGICAL SCIENCES, KÜLAHCI Meryem Burcu, Editor, İksad, Ankara, pp.35-61, 2021
- V. **Organik Kimyada Biyotransformasyonlar**
YENİDÜNYA A. F., BOZTUĞ A., ÇETİNKAYA S., ÖZKAYNAK Ö.
Eğitim Yayınevi, Konya, 2020
- VI. **Structure and Function of Proton Pumps**
ÇETİNKAYA S., YENİDÜNYA A. F.
in: Current Studies at Positive Sciences, Mehriban Emek, İlhan Şahin, Editor, İksad Publications, pp.284-307, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **ISOLATION OF TRADITIONAL KEFIR YEASTS AND INVESTIGATION OF PROBIOTIC PROPERTIES**
KAYA N., Dere T., YENİDÜNYA A. F., ÇETİNKAYA S.
2nd International Karatekin Science and Technology Conference, Çankırı, Turkey, 21 December 2023
- II. **Immobilization of Microbial Pectinase to Chitosan-Based Composite: Experimental, DFT, and Molecular Docking Studies**
AKSU A., ÇETİNKAYA S., YENİDÜNYA A. F., ÇETİNUS Ş., GEZEĞEN H., TÜZÜN B.
2nd International Conference on Engineering, Natural and Social Sciences, Konya, Turkey, 04 April 2023
- III. **Purification of Yeast Metalloprotease by Affinity Chromatography**
AKKAYA B., YENİDÜNYA A. F., AKKAYA R.
IV. Ulusal Afinite Teknikleri Kongresi konferansı, Konya, Turkey, 23 - 27 June 2014
- IV. **Organic Solvent Tolerant B-Amylase From *Lactobacillus Fermentum***
KOCABAY S., AKKAYA B., YENİDÜNYA A. F., ÇETİNKAYA S.
4th International Türk-Pak Conference Chemical Sciences (ITPCCS 2017), 26 - 28 October 2017
- V. **Screening Of Potential Probiotic Properties Of *Lactobacillus Fermentum* Isolated From Newborn Baby Gaita**
KOCABAY S., ÇETİNKAYA S., AKKAYA B., YENİDÜNYA A. F.
8th International Advanced Technologies Symposium, 19 - 21 October 2017
- VI. **Investigation of Circulating Expression Levels miR31 and miR204 In Coronary Artery Disease**
Özbilüm Şahin N., Arslan S., Aydemir E. I., Beton O., Yenidunya A. F.
VI. International Congress of Molecular Medicine, İstanbul, Turkey, 22 - 25 May 2017, pp.90
- VII. **Investigations of Circulating Expression Levels mir31 and mir204 in Coronary Artery Disease**

ÖZBİLÜM ŞAHİN N., ARSLAN S., AYDEMİR E. I., BETON O., YENİDÜNYA A. F.

VI. International Congress of Molecular Medicine, 22 - 25 May 2017

VIII. Genotypic and Phenotypic Characterization of Bacteria in Infant Stools

Akkaya B., Kocabay S., Yenidünya A. F.

3. Ulusal Klinik Mikrobiyoloji Kongresi, İstanbul, Turkey, 18 - 22 November 2015

IX. Characterization of Enzyme Produced Isolates From Fecal Samples

AKKAYA B., ÇETİNKAYA S., YENİDÜNYA A. F.

3rd International Congress of Molecular Biology and Biotechnology, 2 - 06 June 2014

X. Wnt antagonisti gen polimorfizmleri ve meme kanseri arasındaki ilişkinin araştırılması

DÖNMEZ G., YILMAZ M., KAÇAN T., ÇINAR Z., KILIÇKAP S., YENİDÜNYA A. F.

XIII. Ulusal Tıbbi Biyoloji ve Genetik Kongresi, Turkey, 27 - 30 October 2013

XI. Serbest Radikal Kopolimerleşmesi ile Sentezlenen Üç Farklı Maleik Anhidrit Kopolimerinin Sentezi Karakterizasyonu ve Sitotoksik Potansiyellerinin İncelenmesi

Karakuş G., Zengin H. B., Akın Polat Z., Yenidünya A. F.

25. Ulusal Kimya Kongresi (Erzurum), Erzurum, Turkey, 27 June - 02 July 2011

XII. Maleik Anhidrit-Vinil Asetat Kopolimerinin Sentezi, Karakterizasyonu, Noradrenalin ile Türevlendirilmesi ve Sitotoksik Potansiyellerinin Karşılaştırmalı Olarak İncelenmesi

Karakuş G., Akın Polat Z., Zengin H. B., Yenidünya A. F.

25. Ulusal Kimya Kongresi (Erzurum), Erzurum, Turkey, 27 June - 02 July 2011

XIII. Production and Immobilization of a Novel hyper thermoalkalophilic extracellular amylase

AKKAYA B., YENİDÜNYA A. F.

International Conference on Enzyme Science and Technology, ICEST 2011, 13 - 17 June 2011

Supported Projects

Çetinkaya S., Yenidünya A. F., Arslan D., Project Supported by Higher Education Institutions, Actinobacteria Üyelerinden Pigment Üretimi, Kültür Optimizasyonu ve Pigment İzolasyonu, 2020 - 2022

Çetinkaya S., Yenidünya A. F., Arslan K., Project Supported by Higher Education Institutions, Actinobacteria Üyelerinin Beyaz ve Kırmızı Toprak Örneklerinden İzolasyonu, Morfolojik, Fizyolojik, Biyokimyasal ve Moleküler Karakterizasyonu, 2020 - 2021

Çetinkaya S., Yenidünya A. F., Tarhan Ö., Project Supported by Higher Education Institutions, Streptomyces Cinsine Ait Tür Üyelerinden Özütleme İkincil Metabolitlerin Saflaştırması ve Molekül Yapısının Belirlenmesi, 2019 - 2021

Çetinkaya S., Yenidünya A. F., Akın Polat Z., Saraç K., Başoğlu F., Durna Daştan S., Project Supported by Higher Education Institutions, Synthesis of transfer RNA-fatty acid esters and testing of biologically active molecular potentials on pathogenic Acanthamoeba and Trichomonas species., 2019 - 2021

Çetinkaya S., Yenidünya A. F., Savaş S., Berber S., Arslan K., Project Supported by Higher Education Institutions, Toprak Örneklerinden Bacillus clausi Suşlarının İzolasyonu, Genotipik ve Fenotipik Karakterizasyonu, 2018 - 2020

Yenidünya A. F., Çetinkaya S., Project Supported by Higher Education Institutions, Biyoaktif Molekül Analoglarının Yapımında Kullanılabilir Şeker Esterlerinin Sentezi, 2016 - 2018

Özbilüm Şahin N., Berkan Ö., Yenidünya A. F., Project Supported by Higher Education Institutions, Aterosklerozlu Hastaların Koroner Arter Plaklarında ve Dolaşımlarındaki Bazı mikroRNA ların İfade Düzeylerinin İncelenmesi, 2015 - 2018

Çetinkaya S., Yenidünya A. F., Project Supported by Higher Education Institutions, Bazı Bitkisel Fenolik Asitlerin In Vitro Aktioksidan Aktivitelerinin İncelenmesi, 2014 - 2015

Yenidünya A. F., Çetinkaya S., Project Supported by Higher Education Institutions, Fekal örneklerden Proteaz Üreten İzolatların Genotipik ve Fenotipik Karakterizasyonu, 2014 - 2015

Metrics

Publication: 43

Citation (WoS): 118

Citation (Scopus): 180

H-Index (WoS): 7

H-Index (Scopus): 8

Non Academic Experience

Cumhuriyet Üniversitesi

Cumhuriyet Üniversitesi

Cumhuriyet Üniversitesi

İzmir Yüksek Teknoloji Enstitüsü

Danimarka Eczacılık Yüksek Okulu

TÜBİTAK/MAM

ICGEB/TRIESTE