

Res. Asst. Dođukan TUNAY

Personal Information

Email: dtunay@yildiz.edu.tr

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

Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Çevre Mühendisliđi, Turkey
2018 - Continues

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Çevre Mühendisliđi, Turkey 2016 - 2018

Undergraduate, Istanbul Technical University, İnşaat Fakültesi, Çevre Mühendisliđi , Turkey 2010 - 2015

Foreign Languages

English, C1 Advanced

Dissertations

Postgraduate, Kaynađında Ayrı Toplanmış İnsan İdrarında Mikroalg Yetiştirilmesi, İstanbul Teknik Üniversitesi, Çevre Mühendisliđi, 2018

Research Areas

Environmental Engineering, Environmental Technology, Waste Water Collection and Treatment, Life Sciences, Biotechnology, Environmental Biotechnology, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Research Assistant, Yildiz Technical University, Rectorate, Rectorate, 2020 - Continues

Research Assistant, Yildiz Technical University, Faculty Of Civil Engineering, Department Of Environmental Engineering, 2018 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Usage of source separated urine for the biodiesel production from algal biomass**
TUNAY D., Altınbaş M., ÖZKAYA B.
BIOCHEMICAL ENGINEERING JOURNAL, vol.188, 2022 (SCI-Expanded)
- II. **Optimization of oxalic and sulphuric acid pretreatment conditions to produce bio-hydrogen from olive tree biomass**
YILDIRIM Ö., TUNAY D., ÖZKAYA B., DEMİR A.
International Journal of Hydrogen Energy, vol.47, no.62, pp.26316-26325, 2022 (SCI-Expanded)

- III. **Effect of organic fraction of municipal solid waste addition to high rate activated sludge system for hydrogen production from carbon rich waste sludge**
TUNAY D., YILDIRIM Ö., ÖZKAYA B., DEMİR A.
International Journal of Hydrogen Energy, vol.47, no.62, pp.26284-26293, 2022 (SCI-Expanded)
- IV. **Effect of Green synthesized silver oxide nanoparticle on biological hydrogen production**
YILDIRIM Ö., TUNAY D., ÖZKAYA B., DEMİR A.
International Journal of Hydrogen Energy, vol.47, pp.19517-19525, 2022 (SCI-Expanded)
- V. **Determination of photoautotrophic growth and inhibition kinetics by the Monod and the Aiba models and bioenergetics of local microalgae strain**
TUNAY D., YILDIRIM Ö., ÖZKAYA B., DEMİR A.
Chemosphere, vol.292, 2022 (SCI-Expanded)
- VI. **Reuse of sea water reverse osmosis brine to produce Dunaliella salina based 0-carotene as a valuable bioproduct: A circular bioeconomy perspective**
Yıldırım Ö., Tunay D., Özkaya B.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.302, 2022 (SCI-Expanded)
- VII. **Optimization of enzymatic hydrolysis conditions of chemical pretreated cotton stalk using response surface methodology for enhanced bioethanol production yield**
Yıldırım Ö., Tunay D., Özkaya B.
BIOMASS CONVERSION AND BIOREFINERY, 2021 (SCI-Expanded)

Books & Book Chapters

- I. **SUSTAINABLE ETHANOL PRODUCTION FROM LIGNOCELLULOSIC BIOMASS: A WATER FOOTPRINT ANALYSIS OVER PRE-TREATMENT TECHNOLOGIES**
Yıldırım Ö., Tunay D., Özkaya B., Demir A.
in: Bioethanol Biochemistry and Biotechnological Advances, Ayerim Y.Hernandez Almanza, Nagamani Balagurusamy, Hector A.Ruiz, Cristobal N.Aguilar, Editor, Apple Academic Press, Burlington, pp.401-419, 2022

Refereed Congress / Symposium Publications in Proceedings

- I. **Effect of Organic Fraction of Municipal Solid Waste Addition to High Rate Activated Sludge System for Hydrogen Production from Carbon Rich Waste Sludge**
Tunay D., Yıldırım Ö., Özkaya B., Demir A.
5th International Hydrogen Technologies, Niğde, Turkey, 26 - 28 May 2021, pp.232-233
- II. **Effect of Green Synthesized Silver Oxide Nanoparticles on Biological Hydrogen Production**
Yıldırım Ö., Tunay D., Özkaya B., Demir A.
International Hydrogen Technologies Congress (5th IHTEC), 26 - 28 May 2021, pp.52-54
- III. **Optimization of Pretreatment of Olive Tree Biomass using Response Surface Methodology for Biological Hydrogen Production**
Yıldırım Ö., Tunay D., Özkaya B., Demir A.
International Hydrogen Technologies Congress (5th IHTEC), 26 - 28 May 2021, pp.255-256
- IV. **Enhanced Bioethanol Production from Olive Tree Biomass with Different Pretreatment Methods**
Yıldırım Ö., Tunay D., Özkaya B., Demir A.
3rd Bioenergy Studies Symposium, 20 - 21 May 2021, pp.18
- V. **EVSEL VE HAYVANSAL ATIKLARDAN KOMPOST ÜRETİMİ VE UYGULANABİLİRLİĞİNİN İNCELENMESİ**
Akgün B., Tunay D., Duran S., Çebi A., Koşma E. B., Bilgili M. S., Demir A.
Çevre Mühendisliği Kongresi, Kocaeli, Turkey, 10 - 12 October 2019, pp.509-519
- VI. **Application of Thermal Conversion Process to Major Solid and Wet Wastes of Istanbul City**
Çallıalp F., Teymur S., Bostan D., Yıldırım Ö., Tunay D., Civelek Yörüklü H., Özkaya B.

WESCE 2019, İstanbul, Turkey, 26 - 28 August 2019

VII. Determination of hydrogen and methane production from biological sludge based on energy equivalence and environmental impacts

TUNAY D., YILDIRIM Ö., KÖROĞLU E. O., ÖZKAYA B.

4. International Hydrogen Technologies Congress-IHTEC 2019, 20 - 23 June 2019, no.309

VIII. Feasibility of Biological Hydrogen and Alcohol Production from Sunflower Straw

Yıldırım Ö., Civelek Yörüklü H., Tunay D., Köroğlu E. O., Özkaya B., Demir A.

International Hydrogen Technologies Congress, Edirne, Turkey, 20 - 23 June 2019, no.315, pp.109

IX. Production Of Microalgae Using Centrate Wastewater

Sarılar İ., Tunay D., Özkaya B.

International Conference on Civil, Environmental, Geology and Mining Engineering, Trabzon, Turkey, 20 - 22 April 2019, pp.320

X. Cultivation of Spirulina platensis Using Anaerobic Digestion Effluent As a Nutrient Source For Biomass Production

Ermış H., Tunay D., Altınbaş M.

2nd INTERNATIONAL CONFERENCE ON CIVIL AND ENVIRONMENTAL ENGINEERING, Nevşehir, Turkey, 8 - 10 May 2017, pp.2519

XI. Detection of the dilution factors for anaerobic digestate to cultivation of mixed culture microalgae and detection of particulate matters affect on cultivation

Tunay D., Ermış H., Altınbaş M.

2nd INTERNATIONAL CONFERENCE ON CIVIL AND ENVIRONMENTAL ENGINEERING, Nevşehir, Turkey, 8 - 10 May 2017, pp.2005

Supported Projects

Altınbaş M., Koyuncu İ., TUBITAK Project, Kanal Tipi Membran Fotobiyoreaktör Sistemi Ile Anaerobik Çürütücü Çıkış Suyunda Mikroalg Üretimi, 2016 - 2018

Metrics

Publication: 20

Citation (WoS): 7

Citation (Scopus): 10

H-Index (WoS): 2

H-Index (Scopus): 2

Non Academic Experience

Business Establishment Private, Doğa Çevre Yön. Ve Alt. Enerji Tek. Müh. Eğitim Ve Danışmanlık Hiz. Ltd. Şti.

Other Public Institution, Ataköy İleri Biyolojik Atıksu Arıtma Tesisi