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International Researcher IDs
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Publons / Web Of Science ResearcherID: ABG-5232-2021
ScopusID: 57208883929
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Education

Doctorate, Ege University, Fen Bilimleri Enstitüsü, Biyomühendislik, Turkey 2020 - 2026
Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Biyomühendislik, Turkey 2017 - 2020
Undergraduate, Ege University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey 2013 - 2017
Undergraduate, Ege University, Mühendislik Fakültesi, Biyomühendislik, Turkey 2011 - 2016

Foreign Languages

English

Dissertations

Doctorate, Mikroalgal Pigmentlerin Doğal Tekstil Boyar Madde Olarak Potansiyel Kullanımı, Ege University, Fen Bilimleri Enstitüsü, Biyomühendislik Bölümü, 2026
Postgraduate, Porphyridium cruentum mikroalginden biyojenik nanopartiküllerin sentezlenmesi, Ege University, Fen Bilimleri Enstitüsü, Biyomühendislik Bölümü, 2020

Research Areas

Avesis Research Areas: Engineering and Technology
WoS Research Areas: Engineering Computing & Technology (Eng), Engineering
Scopus Research Areas: General Engineering

Academic Positions

Research Assistant, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, Biyomühendislik, 2019 - Present

Articles

Articles

I. **Chlorella Zofingiensis Astaxanthin Production in Photobioreactors for Natural Wool Dyeing: Effects of Chitosan, Air Plasma, and Argon Plasma Surface Treatments on Dyeing Performance**
Yarkent Ç., MUTAF KILIÇ T., Çinar Ö., Demir A., Elibol M., Oncel S. S.
FIBERS AND POLYMERS, vol.27, no.7, pp.3271-3292, 2026 (SCI-Expanded, Scopus)

II. **Eco-friendly dyeing of wool fabrics with fucoxanthin-rich extract using chitosan biomordant: A sustainable approach for UV protection and antibacterial activity**
MUTAF KILIÇ T., Demir A., Elibol M., Oncel S. S.
ALGAL RESEARCH-BIOMASS BIOFUELS AND BIOPRODUCTS, vol.96, 2026 (SCI-Expanded, Scopus)

III. **Advancing microbial fuel cells: Scale-up strategies and challenges for sustainable bioelectricity production and beyond**
Mutaf-Kilic T., Yarkent Ç., Oncel S. S.
Biomass and Bioenergy, vol.208, 2026 (SCI-Expanded, Scopus)

IV. **Porphyridium cruentum as a biological component for the green synthesis of metal nanoparticles and for the evaluation of their antimicrobial activity**
Mutaf-Kilic T., Caliskan G., Oncel S. S., Elibol M.
Biotech Studies, vol.34, pp.83-92, 2025 (Scopus)

V. **Microalgae pigments as a sustainable approach to textile dyeing: A critical review**
MUTAF KILIÇ T., DEMİR A., Elibol M., Oncel S. S.
Algal Research, vol.76, 2023 (SCI-Expanded, Scopus)

VI. **Green synthesis of titanium nanoparticles using a sustainable microalgal metabolite solution for potential biotechnological activities**
MUTAF KILIÇ T., Caliskan G., Ozel H., Akagac G., Öncel S. Ş., Elibol M.
Asia-Pacific Journal of Chemical Engineering, vol.18, no.5, 2023 (SCI-Expanded, Scopus)

VII. **Green synthesis of metal nanoparticles by microalgae**
MUTAF KILIÇ T., ÇALIŞKAN BİLGİN G., ÖNCEL S. Ş., ELİBOL M.
SU URUNLERI DERGISI, vol.40, no.1, 2023 (ESCI, TRDizin)

VIII. **Bubble column and airlift bioreactor systems for animal cell culture applications**
MUTAF KILIÇ T., Oncel S. S.
Asia-Pacific Journal of Chemical Engineering, vol.18, no.1, 2023 (SCI-Expanded, Scopus)

IX. **Green Synthesis and Characterization of Titanium Nanoparticles Using Microalga, Phaeodactylum tricornutum**
Caliskan G., MUTAF KILIÇ T., Agba H. C., Elibol M.
Geomicrobiology Journal, vol.39, no.1, pp.83-96, 2022 (SCI-Expanded, Scopus)

X. **The effect of medium and light wavelength towards Stichococcus bacillaris fatty acid production and composition**
MUTAF KILIÇ T., Oz Y., Kose A., Elibol M., Oncel S. S.
Bioresource Technology, vol.289, 2019 (SCI-Expanded, Scopus)

Books

I. **Prospects of Microalgae Industry 5.0: Customization and New Advanced Technology for Microalgae Pigments Production**
Yarkent Ç., MUTAF KILIÇ T., ÖNCEL S. Ş.
in: Pigments from Microalgae Handbook— Volume IIBioprocess Engineering, Smart Extraction Technologies, Omics Tools, and Sustainability-Driven Innovations, Springer, pp.365-391, 2026

II. **Scaling up the Production of Microalgal Pigments for Commercial Applications**
MUTAF KILIÇ T., İNAM A., FİLİZFİDANOĞLU A., DENİZ CAN İ.
in: Pigments from Microalgae Handbook, Deprá Mariany Costa, Jacob-Lopes Eduardo, Queiroz Maria Isabel, Zepka Leila Queiroz, Editor, Springer, Cham, pp.21-45, 2026

III. **Biohydrogen Production with Photosynthetic Microorganisms (Microalgae, Cyanobacteria, Purple**

Bacteria): Opportunities and Constraints
Faraloni C., Touloupakis E., Yarkent Ç., MUTAF KILIÇ T., MİS B., ÖNCEL S. Ş., Torzillo G.
in: A Green Vision Towards a Renewable Energy Future, ÖNCEL SUPHİ ŞURİŞVAN, Editor, Springer, pp.153-200, 2025

IV. **Algal and Cyanobacterial Colorants: From Chlorophyll to Phycocyanin**
MUTAF KILIÇ T., Oncel S. S.
in: Microbial Colorants: Chemistry, Biosynthesis and Applications, wiley, pp.81-105, 2025

V. **Life cycle assessment of biofuels**
MUTAF KILIÇ T., İNAM A., DENİZ CAN İ.
in: Bioenergy Engineering: Fundamentals, Methods, Modelling, and Applications, Elsevier, pp.535-549, 2023

VI. **University-Industry Collaboration: A Way to New Technologies**
YARKENT Ç., MUTAF KILIÇ T., TEMEL S., VARDAR F., ÖNCEL S. Ş.
in: University-Industry Collaboration: A Way to New Technologies, Öncel Suphi Şurişvan, Editor, Springer Cham, pp.53-68, 2023

VII. **Sustainable biorefineries for circular bioeconomy**
İNAM A., MUTAF KILIÇ T., DENİZ CAN İ.
in: Biomass, Biofuels, Biochemicals: Circular Bioeconomy: Technologies for Biofuels and Biochemicals, Elsevier, pp.3-28, 2021

Papers Presented at Peer-Reviewed Scientific Conferences

I. **Fungus-Derived Carbon Quantum Dots: Green Synthesis, Characterization, and Application Potential**
MUTAF KILIÇ T., Gasımova G., ALTINKAYA E., KALYONCU F.
5th International Symposium of Scientific Research and Innovative Studies (ISSRIS'25), Balıkesir, Turkey, 19 March 2025, (Full Text)

II. **Carbon Dots for Diagnosis of Fungal Diseases**
Gasımova G., MUTAF KILIÇ T., ALTINKAYA E.
5th International Symposium of Scientific Research and Innovative Studies (ISSRIS'25), Balıkesir, Turkey, 19 March 2025, (Full Text)

III. **Microalgae Phycobiliproteins as Sustainable Textile Dyes: Optimization of Dyeing Parameters and Evaluation of Dyeing Performance**
MUTAF KILIÇ T., DEMİR A., ELİBOL M., ÖNCEL S. Ş.
3rd AQUATIC BIOTECHNOLOGY SYMPOSIUM, İstanbul, Turkey, 25 - 27 September 2024, (Summary Text)

IV. **Porphyridium cruentum Mikroalgi Kullanılarak Metal Nanopartiküllerin Yeşil Sentezi Ve Antimikrobiyal Aktivitenin Değerlendirilmesi**
MUTAF KILIÇ T., ÇALIŞKAN BİLGİN G., ÖNCEL S. Ş., ELİBOL M.
VIII. Ulusal Biyomühendislik Kongresi, Manisa, Turkey, 16 - 18 May 2024, (Summary Text)

V. **MICROALGAE PIGMENTS AS AN ALTERNATIVE FOR NATURAL TEXTILE DYEING**
MUTAF KILIÇ T., ÖNCEL S. Ş., ELİBOL M.
IITAS 2021, Turkey, 26 October 2021, (Full Text)

VI. **Biogenic Nanoparticle Synthesis Using Marine Alga Schizochytrium sp**
MUTAF T., ÇALIŞKAN G., Meydan C., ÖNCEL S. Ş., ELİBOL M.
International Conference on Medical and Biological Engineering (CMBEBIH 2019), Bosnia And Herzegovina, 16 - 18 May 2019, pp.213-218, (Full Text)

VII. **Green Synthesis of Metal Nanoparticles Using Microalga Galdieria sp**
ÇALIŞKAN G., MUTAF T., ÖNCEL S. Ş., ELİBOL M.
International Conference on Medical and Biological Engineering" CMBEBIH-2019, Bosnia And Herzegovina, 16 - 18 May 2019, pp.219-224, (Full Text)

Funded Projects

ALTINKAYA E., MUTAF KILIÇ T., ALTINIŞIK TAĞAÇ A., BOZACI E., Tosunoğlu E., TUBITAK Project, 1005 - National New Ideas and Products Research Support Program, B, Si katkılı karbon noktalar ile güç tutuşur, çok fonksiyonlu otomotiv tekstillerinin elde edilmesi, 2026 - 2028
Mutaf Kılıç T., Altınkaya E., Project Supported by Higher Education Institutions, BAP Other, Linum Usitatissimum Kaynaklı Karbon Nokta Sentezi ve Antikanser Aktivitesinin İncelenmesi, 2025 - 2026
ALTINKAYA E., AYKIN H., MUTAF KILIÇ T., Project Supported by Higher Education Institutions, BAP Other, Scirpoides Holoschoenus Bitkisinden Fiber Elde Edilmesi ve Karakterizasyonu, 2025 - 2026
Mutaf Kılıç T., Altınkaya E., Project Supported by Higher Education Institutions, BAP Research Project, Floresan Özellikli Karbon Nokta İçeren Yeni Nesil Gıda Ambalajı Geliştirilmesi ve Karakterizasyonu, 2024 - 2026
ÇÖVEN F. O., ÖNCÜ ÖNER T., ALTINKAYA E., Gümüş Nano Partikül Katkılı Floresan Karbon Noktaların Üretimi, Karakterizasyonu Ve Kitosan Esaslı Yara Örtüsü Geliştirilmesinde Kullanımı, 2024 - Present
Altınkaya E., Mutaf Kılıç T., Project Supported by Higher Education Institutions, BAP Other, Gümüş Nano Partikül Katkılı Salvia Officinalis Prekürsörlü Karbon Kuantum Noktaların Sentezlenmesi ve Karakterizasyonu, 2024 - 2025
DEMİR A., ELİBOL M., ÖNCEL S. Ş., Mikroalgal Pigmentlerin Doğal Tekstil Boyar Maddesi Olarak Kullanım Potansiyelinin Araştırılması, 2023 - 2025
Çöven F. O., Mutaf Kılıç T., İnam A., Türk A., Öncü Öner T., Deniz Can İ., Project Supported by Higher Education Institutions, BAP Other, Sürdürülebilir ve Yaşanabilir Bir Dünya İçin Öğrenci Atölyesi, 2022 - 2022
ALTINKAYA E., MUTAF KILIÇ T., Project Supported by Higher Education Institutions, Çöven Otu (Saponaria Officinalis L.) Sulu Ekstraktı İle Gümüş Nanopartiküllerin (Agnps) Biyojenik Sentezinin Optimizasyonu ve Antioksidan Aktivitesinin Belirlenmesi, 2022 - 2023
ÖNCEL S. Ş., Mikroalglerin Kozmetik Amaçlı Skualen Üretim Potansiyelinin İncelenmesi, 2021 - 2023
ELİBOL M., Mikroalglerden Biyojenik Nanopartiküllerin Sentezlenmesi, Optimizasyonu Ve Biyoteknolojide Kullanım Potansiyelinin Araştırılması, 2017 - 2020

Metrics

Publication: 24
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Citation (Scopus): 148
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H-Index (Scopus): 5