

## Asst. Prof. CANAN YAĞMUR KARAKAŞ

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: HWQ-6337-2023

ScopusID: 57202860045

Yoksis Researcher ID: 418789

### Education Information

Doctorate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Gıda Mühendisliği, Turkey 2017 - 2024

Postgraduate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Biyomühendislik, Turkey 2015 - 2017

Undergraduate, Yıldız Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Bioengineering, Turkey 2011 - 2015

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Health&Medicine, Applied Cell Culture and Molecular Biology Research Course, Atlas Biyoteknoloji, 2022

Health&Medicine, HPLC Advanced Application Techniques Training Certificate, SayChemCo, 2022

Quality Management, Analytical Method Validation Certificate, SayChemCo, 2022

### Dissertations

Doctorate, Gıda biyoaktiflerinin enkapsülasyonu için hibrit sistemler geliştirilmesi, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, 2024

Postgraduate, Algal biyoaktif yüklü nanopartiküllerin elektrosprey ve mikroemülsiyon teknikleriyle üretimi ve karakterizasyonu, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Bioengineering, 2017

### Research Areas

Food Engineering, Food Science, Food Technology, Biomaterial, Biosensor, Microbiological Chemistry, Engineering and Technology

## Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Food Engineering, 2024 - Continues

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Liposomal propolis loaded xanthan gum-salep hydrogels: Preparation, characterization, and in vitro bioaccessibility of phenolics**  
SAROĞLU Ö., KARAKAŞ C. Y., Yildirim R. M., Erdem O., KARASU S., SAĞDIÇ O., KARADAĞ A.  
International Journal of Biological Macromolecules, vol.300, 2025 (SCI-Expanded)
- II. **Liposomal black mulberry extract loaded-nanofibers: preparation, characterisation, and bioaccessibility of phenolics by simulated in vitro digestion combined with the Caco-2 cell model**  
Kalintas Caglar N., SAROĞLU Ö., Karakas C. Y., Tasci C. O., Çatakaya G., Yildirim R. M., Gultepe E. E., Gulec S., SAĞDIÇ O., Çapanoğlu Güven E., et al.  
International Journal of Food Science and Technology, vol.59, no.12, pp.9298-9309, 2024 (SCI-Expanded)
- III. **Application of purple basil leaf anthocyanins-loaded alginate-carrageenan emulgel beads in gelatin-based jelly candies**  
Ozcan B. E., Karakas C. Y., KARADAĞ A.  
International Journal of Biological Macromolecules, vol.277, 2024 (SCI-Expanded)
- IV. **Microencapsulation of Yeast Cells and Its Potential Usage as a Post-Harvest Biocontrol Agent for Citrus Storage**  
Berber Orcen B., Karakas C. Y., Orcen A., Tulimat M. A., ÇAKIR R.  
Agronomy, vol.14, no.7, 2024 (SCI-Expanded)
- V. **Emulsion-based edible chitosan film containing propolis extract to extend the shelf life of strawberries**  
Akkuzu N., Karakas C. Y., Devocioğlu D., Karbancıoğlu Güler H. F., SAĞDIÇ O., KARADAĞ A.  
International Journal of Biological Macromolecules, vol.273, 2024 (SCI-Expanded)
- VI. **Development of Graphene Oxide-Based Anticancer Drug Combination Functionalized with Folic Acid as Nanocarrier for Targeted Delivery of Methotrexate**  
Yanikoglu R., Karakas C. Y., Ciftci F., İNSEL M. A., Karavelioglu Z., Varol R., Yilmaz A., ÇAKIR R., ÜVET H., ÜSTÜNDAĞ C. B.  
Pharmaceutics, vol.16, no.6, 2024 (SCI-Expanded)
- VII. **Co-axial electrospinning of liposomal propolis loaded gelatin-zein fibers as a potential wound healing material**  
Karakas C. Y., ÜSTÜNDAĞ C. B., ŞAHİN A., KARADAĞ A.  
Journal of Applied Polymer Science, vol.140, no.46, 2023 (SCI-Expanded)
- VIII. **Encapsulation of purple basil leaf extract by electrospaying in double emulsion (W/O/W) filled alginate-carrageenan beads to improve the bioaccessibility of anthocyanins**  
Ozcan B. E., Saroglu Ö., Karakas C. Y., Karadag A.  
International Journal of Biological Macromolecules, vol.250, 2023 (SCI-Expanded)
- IX. **Enhanced Antifungal Activity of Electrospayed Poly (vinyl alcohol)/Chitosan Nanospheres Loaded with Sage Essential Oil on the Viability of Aspergillus niger and Botrytis cinerea**  
ERARSLAN A., KARAKAŞ C. Y., BOZKURT F., SAĞDIÇ O.  
ChemistrySelect, vol.8, no.21, 2023 (SCI-Expanded)
- X. **Encapsulation of Lactobacillus plantarum ELB90 by electrospaying in a double emulsion**

**(W1/O/W2) loaded alginate beads to improve the gastrointestinal survival and thermal stability**

Karakaş C. Y., Yildirim R. M., Karadağ A.

Journal of the Science of Food and Agriculture, vol.103, no.7, pp.3427-3436, 2023 (SCI-Expanded)

- XI. **Electrosprayed chitosan-coated alginate-pectin beads as potential system for colon-targeted delivery of ellagic acid**  
Karakaş C. Y., Ordu H. R., BOZKURT F., KARADAĞ A.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.102, no.3, pp.965-975, 2022 (SCI-Expanded)
- XII. **A novel approach to production of *Chlorella protothecoides* oil-loaded nanoparticles via electrospraying method: Modeling of critical parameters for particle sizing**  
KARAKAŞ C. Y., Özçimen D.  
Biotechnology and Applied Biochemistry, vol.68, no.3, pp.659-668, 2021 (SCI-Expanded)
- XIII. **Determination of textural deterioration in fish meat processed with electrospun nanofibers**  
Ceylan Z., Meral R., Alav A., Karakas C. Y., YILMAZ M. T.  
JOURNAL OF TEXTURE STUDIES, vol.51, no.6, pp.917-924, 2020 (SCI-Expanded)
- XIV. **An alternative way to encapsulate probiotics within electrospun alginate nanofibers as monitored under simulated gastrointestinal conditions and in kefir**  
Yilmaz M. T., Taylan O., Karakas C. Y., DERTLİ E.  
CARBOHYDRATE POLYMERS, vol.244, 2020 (SCI-Expanded)
- XV. **Effect of electrospun nisin and curcumin loaded nanomats on the microbial quality, hardness and sensory characteristics of rainbow trout fillet**  
Meral R., Alav A., Karakas C. Y., Dertli E., YILMAZ M. T., Ceylan Z.  
LWT, vol.113, 2019 (SCI-Expanded)
- XVI. **In vitro cytotoxic activity of microalgal extracts loaded nano-micro particles produced via electrospraying and microemulsion methods**  
Karakaş C. Y., Sahin H. T., İnan B., Özçimen D., Erginer Y.  
BIOTECHNOLOGY PROGRESS, vol.35, no.6, 2019 (SCI-Expanded)
- XVII. **A new application on fatty acid stability of fish fillets: Coating with probiotic bacteria-loaded polymer-based characterized nanofibers**  
Ceylan Z., Meral R., Cavidoğlu İ., KARAKAŞ C. Y., Tahsin Yilmaz M.  
Journal of Food Safety, vol.38, no.6, 2018 (SCI-Expanded)
- XVIII. **A novel strategy for probiotic bacteria: Ensuring microbial stability of fish fillets using characterized probiotic bacteria-loaded nanofibers**  
Ceylan Z., Meral R., Karakaş C. Y., Dertli E., YILMAZ M. T.  
Innovative Food Science and Emerging Technologies, vol.48, pp.212-218, 2018 (SCI-Expanded)
- XIX. **Encapsulation of probiotic living cells in alginate-PVA based electrospun nanofibers: Evaluation of viability and survival in simulated gastrointestinal conditions**  
Karakaş C. Y., Duman D., Yilmaz M. T.  
JOURNAL OF BIOTECHNOLOGY, vol.280, pp.1-2, 2018 (SCI-Expanded)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Gıda Kaynaklı Biyoaktif Bileşiklerin Nutrikozmetik Olarak Kullanımları**  
SAĞDIÇ O., KARAKAŞ C. Y., MUTLU D.  
Fitovizyon Kongresi, 22 - 23 February 2025
- II. **Encapsulation of Anthocyanins of Purple Basil Leaf**  
Özcan B. E., Saroğlu Ö., Karakaş C. Y., Karadağ A.  
INTERNATIONAL MALDIA HEALTH SCIENCES CONGRESS, Gaziantep, Turkey, 14 - 16 October 2023, pp.1-2
- III. **Encapsulation of probiotic bacteria by electrospraying in a double emulsion (W1/O/W2) loaded alginate beads to improve the gastrointestinal survival and thermal stability**  
Karakaş C. Y., Metin Yıldırım R., Karadağ A.

17th International Nanoscience and Nanotechnology Conference, İzmir, Turkey, 27 - 29 August 2023, pp.1-2

#### IV. Fabrication of propolis loaded electrosprayed nanoparticles

ÖZMEN D., Karakas C. Y., YILMAZ A., Dertli E., Bayram N. E., Yilmaz M. T.

European Biotechnology Congress, Athens, Greece, 26 - 28 April 2018, vol.280

### Supported Projects

Karakas C. Y., Biyoteknoloji N., TUBITAK Project, Örtü Altı-Açık Alan Bitki Yetiştiriciliğinde Görülen İki noktalı kırmızı örümcek (*Tetranychus Urticae*) (Koch)'E Karşı Bitkisel Temmelli Mikronalti Parçacık Boyutlu Formülasyonların Geliştirilmesi, 2024 - 2026

Karadağ A., Saroğlu Ö., TUBITAK Project, Gıda Biyoaktif Bileşenlerinin Enkapsülasyonunda Yenilikçi Mukozaya Tutunabilen Özellikte Lipozomal Hidrojel ve Nanolipozomal Film Hibrit Sistemlerinin Geliştirilmesi, 2021 - 2024

### Mobility Activity

Bilateral Colloboration Agreement, Post Doc, Zewail City of Science, Technology and Innovation, Egypt, 2024 - 2024

### Metrics

Publication: 23

Citation (WoS): 377

Citation (Scopus): 418

H-Index (WoS): 8

H-Index (Scopus): 8

### Scholarships

2250-Lisansüstü Bursları Performans Programı, TUBITAK, 2022 - 2024

2211-A Yurtiçi Doktora Burs Programı, TUBITAK, 2018 - 2022

100/2000 Doktora Bursu, YOK, 2017 - 2021

### Awards

Karakas C. Y., Biyomühendislik Bölüm Üçüncülük Derecesi, Yıldız Teknik Üniversitesi, June 2015

### Non Academic Experience

Business Establishment Private, Nanomik Biyoteknoloji, AR-GE, Formülasyon Geliştirme Uzmanı