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Personal Information

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International Researcher IDs

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği (Dr), Turkey 2015 - 2021

Postgraduate, Ege University, Fen Bilimleri Enstitüsü, Gıda Teknolojisi (YI), Turkey 2011 - 2014

Undergraduate Double Major, Ege University, Faculty Of Engineering, Biyomühendislik Bölümü, Turkey 2009 - 2013

Undergraduate, Ege University, Faculty Of Engineering, Gıda Mühendisliği Bölümü, Turkey 2007 - 2011

Foreign Languages

English

Dissertations

Doctorate, Effects of novel food processing techniques on bioaccessibility and transepithelial transport of cranberrybush polyphenols, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2021

Postgraduate, Ispanaktan ekstrakte edilen Zn-klorofil türevlerinin emülsiyon/soğuk jelleşme metodu ile mikrokapsülasyonu, Ege Üniversitesi, Fen Bilimleri Enstitüsü, Gıda Teknolojisi (YI), 2014

Research Areas

Food Engineering, Food Science, Food Chemistry, Food Technology, Fruits, Vegetables and Nuts, Food Processing (pasteurisation, sterilisation, refrigeration, lyophilisation, etc.), Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Istanbul Technical University, Kimya-Metalurji, Gıda Mühendisliği, 2023 - Continues

Lecturer, Istanbul Technical University, Kimya-Metalurji, Gıda Mühendisliği, 2019 - 2023

Research Assistant, Istanbul Technical University, Kimya-Metalurji, Gıda Mühendisliği, 2015 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Formulation of Functional Drink with Milk Fortification: Effects on the Bioaccessibility and Intestinal Absorption of Phenolics**
Özkan G., Çapanoğlu Güven E., Esatbeyoğlu T.
PLANTS, vol.11, no.23, pp.3364, 2022 (SCI-Expanded)
- II. **Entrapment of Black Carrot Anthocyanins by Ionic Gelation: Preparation, Characterization, and Application as a Natural Colorant in Yoghurt**
Tavlasoglu M., Özkan G., Çapanoğlu Güven E.
ACS OMEGA, vol.7, pp.32481-32488, 2022 (SCI-Expanded)
- III. **Bioavailability of Rosehip (*Rosa canina* L.) Infusion Phenolics Prepared by Thermal, Pulsed Electric Field and High Pressure Processing**
Özkan G., Esatbeyoglu T., Çapanoğlu Güven E.
FOODS, vol.11, no.13, 2022 (SCI-Expanded)
- IV. **Bioaccessibility and transepithelial transportation of cranberrybush (*Viburnum opulus*) phenolics: Effects of non-thermal processing and food matrix**
Özkan G., Kostka T., Draeger G., Çapanoğlu Güven E., Esatbeyoglu T.
FOOD CHEMISTRY, vol.380, 2022 (SCI-Expanded)
- V. **A comparative study on physicochemical properties and in vitro bioaccessibility of bioactive compounds in rosehip (*Rosa canina* L.) infusions treated by non-thermal and thermal treatments**
Özkan G., Stuebler A., Aganovic K., Draeger G., Esatbeyoglu T., Çapanoğlu Güven E.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.46, no.6, 2022 (SCI-Expanded)
- VI. **Investigating the effects of supercritical antisolvent process and food models on antioxidant capacity, bioaccessibility and transepithelial transport of quercetin and rutin**
Özkan G., Franco P., De Marco I., Çapanoğlu Güven E., Esatbeyoglu T.
FOOD & FUNCTION, vol.13, no.8, pp.4469-4477, 2022 (SCI-Expanded)
- VII. **Biomarkers of Oxidative Stress and Antioxidant Defense**
DEMİRCİ ÇEKİÇ S., Özkan G., AVAN A. N., Uzunboy S., Çapanoğlu Güven E., APAK M. R.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.209, 2022 (SCI-Expanded)
- VIII. **Retention of polyphenols and vitamin C in cranberrybush pur ' ee (*Viburnum opulus*) by means of non-thermal treatments**
Özkan G., Stuebler A., Aganovic K., Draeger G., Esatbeyoglu T., Çapanoğlu Güven E.
FOOD CHEMISTRY, vol.360, 2021 (SCI-Expanded)
- IX. **Valorization and Application of Fruit and Vegetable Wastes and By-Products for Food Packaging Materials**
Bayram B., Özkan G., Kostka T., Çapanoğlu Güven E., Esatbeyoglu T.
MOLECULES, vol.26, no.13, 2021 (SCI-Expanded)
- X. **Effects of Lipid-Based Encapsulation on the Bioaccessibility and Bioavailability of Phenolic Compounds**
Özkan G., Kostka T., Esatbeyoglu T., Çapanoğlu Güven E.
MOLECULES, vol.25, no.23, 2020 (SCI-Expanded)
- XI. **PVP/flavonoid coprecipitation by supercritical antisolvent process**
Özkan G., Franco P., Capanoglu E., De Marco I.
CHEMICAL ENGINEERING AND PROCESSING-PROCESS INTENSIFICATION, vol.146, 2019 (SCI-Expanded)
- XII. **A review of microencapsulation methods for food antioxidants: Principles, advantages, drawbacks and applications**
Özkan G., Franco P., De Marco I., Xiao J., Çapanoğlu Güven E.
FOOD CHEMISTRY, vol.272, pp.494-506, 2019 (SCI-Expanded)
- XIII. **EFFECT OF NOVEL FOOD PROCESSING TECHNOLOGIES ON BEVERAGE ANTIOXIDANTS**
Özkan G., Guldiken B., Çapanoğlu Güven E.
PROCESSING AND SUSTAINABILITY OF BEVERAGES: VOL 2: THE SCIENCE OF BEVERAGES, vol.2, pp.413-449, 2019 (SCI-Expanded)

- XIV. **Phytochemicals of herbs and spices: Health versus toxicological effects**
Guldiken B., OZKAN G., Çatalkaya G., Ceylan F. D., YALCINKAYA I. E., CAPANOGLU E.
FOOD AND CHEMICAL TOXICOLOGY, vol.119, pp.37-49, 2018 (SCI-Expanded)
- XV. **Black carrot pomace as a source of polyphenols for enhancing the nutritional value of cake: An in vitro digestion study with a standardized static model**
Kamiloglu S., Ozkan G., İSİK H., HOROZ O., VAN CAMP J., Capanoglu E.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.77, pp.475-481, 2017 (SCI-Expanded)
- XVI. **The effects of industrial production on black carrot concentrate quality and encapsulation of anthocyanins in whey protein hydrogels**
Bilek S. E., Yilmaz F. M., Ozkan G.
FOOD AND BIOPRODUCTS PROCESSING, vol.102, pp.72-80, 2017 (SCI-Expanded)
- XVII. **Potential Use of Turkish Medicinal Plants in the Treatment of Various Diseases**
Özkan G., KAMİLOĞLU BEŞTEPE S., Ozdal T., Boyacioglu D., Çapanoğlu Güven E.
MOLECULES, vol.21, no.3, 2016 (SCI-Expanded)
- XVIII. **Enzyme assisted extraction of stabilized chlorophyll from spinach**
Özkan G., BİLEK S.
FOOD CHEMISTRY, vol.0, 2015 (SCI-Expanded)

Articles Published in Other Journals

- I. **Food Sustainability and Agricultural Waste Management**
Özkan G., Gültekin Subaşı B., Kamiloğlu Beştepe S., Çapanoğlu Güven E.
Çevre İklim ve Sürdürülebilirlik, vol.23, no.2, pp.145-160, 2022 (Peer-Reviewed Journal)
- II. **Food safety, waste management, and sustainability issues in Turkey**
Ozkan G., Capanoglu E.
eFood, vol.3, no.4, pp.23, 2022 (Peer-Reviewed Journal)
- III. **Investigating the Antioxidant Properties of Some Herbal Infusions During In Vitro Digestion**
Özkan G., Aras A., Çapanoğlu Güven E.
Journal of Apitherapy and Nature1, vol.5, no.1, pp.1-13, 2022 (Peer-Reviewed Journal)
- IV. **Persimmon (Diospyros Kaki L.) Alleviates Ethanol-Induced Gastric Ulcer in Rats**
GÜLER M. C., TANYELİ A., ERASLAN E., BOZHÜYÜK M. R., EKİNCİ AKDEMİR F. N., TOKTAY E., KURT N., ÇAPANOĞLU GÜVEN E., ÖZKAN G.
Southern Clinics of Istanbul Eurasia, vol.32, pp.1-7, 2021 (Peer-Reviewed Journal)
- V. **Gastroprotective Effects of Pear (Pyrus Communis L.) Extract on Ethanol Induced Gastric Ulcer in Rats**
ERASLAN E., TANYELİ A., BOZHÜYÜK M. R., GÜLER M. C., TOKTAY E., KURT N., ÖZKAN G., ÇAPANOĞLU GÜVEN E.
International Journal of Academic Medicine and Pharmacy, vol.3, no.1, pp.1-6, 2021 (Peer-Reviewed Journal)
- VI. **Interaction of phenolics with food matrix: In vitro and in vivo approaches**
Pinarli B., Karlıga E. S., Özkan G., Çapanoğlu Güven E.
MEDITERRANEAN JOURNAL OF NUTRITION AND METABOLISM, vol.13, no.1, pp.63-74, 2020 (ESCI)
- VII. **ÇİNKO-KLOROFİL TÜREVLERİNİN PEYNİR ALTI SUYU PROTEİNİ İLE EMÜLSİYON/SOĞUK JELLEŞME YÖNTEMİ İLE ENKAPSÜLASYONU**
BİLEK S., ÖZKAN G.
GIDA / THE JOURNAL OF FOOD, vol.43, pp.174-183, 2018 (Peer-Reviewed Journal)
- VIII. **Microwave Drying of Black Olive Slices : Effects on Total Phenolic Contents and Colour**
İÇİER F., BAYSAL T., TAŞTAN Ö., ÖZKAN G.
GIDA, vol.39, no.6, 2014 (Peer-Reviewed Journal)
- IX. **Microencapsulation of natural food colourants**
ÖZKAN G., BİLEK S.
International Journal of Nutrition and Food Sciences, 2014 (Peer-Reviewed Journal)

- X. **Domates Suyu Üretiminde Ilımlı Elektrik Uygulamasının Kullanımı-1. İşlem koşullarının belirlenmesi**
İÇİER F., BAYSAL T., RAYMAN ERGÜN A., ÖZKAN G., EROĞLU S., Aydın A.
AKADEMIK GIDA, 2013 (Peer-Reviewed Journal)
- XI. **Gıda İşleme ve Depolamanın Karotenoidler Üzerine Etkisi**
ERSUS S., ÖZKAN G.
AKADEMIK GIDA, 2012 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Application of high pressure processing in ensuring food safety**
Özkan G., Gültekin Subaşı B., Çapanoğlu Güven E., Esatbeyoğlu T.
in: Non-thermal Food Processing Operations, Seid Mahdi Jafari, Nantawan Therdthai, Editor, Woodhead Publishing Limited, Massachusetts, pp.319-357, 2023
- II. **Toxicological effects of commonly used herbs and spices**
GÜLDİKEN B., Catalkaya G., CEYLAN F. D., Ozkan G., ÇAPANOĞLU GÜVEN E.
in: Toxicology Oxidative Stress and Dietary Antioxidants, Patel Vinood B., Preedy Victor R., Editor, Academic Press, Londrina, pp.201-213, 2021
- III. **Consumption, Bioaccessibility, Bioavailability of Anthocyanins and Their Interactions with Gut Microbiota**
Çatalkaya G., Ceylan F. D., Özkan G., Güldiken B., Çapanoğlu Güven E.
in: Anthocyanins: Antioxidant Properties, Sources and Health Benefits, José Manuel Lorenzo Rodriguez, FRANCISCO J. BARBA, PAULO MUNEKATA, Editor, NOVA Science Publishers Inc., New York, pp.107-140, 2020
- IV. **Nanosensors for Foods**
TOYDEMİR ŞEN G., DEMİRCİ ÇEKİÇ S., ÖZKAN G., Uzunboy S., AVAN A. N., ÇAPANOĞLU GÜVEN E., APAK M. R.
in: Nano-food Engineering, Gustavo V. Barbosa-Canovas, Umesh Hebbar, Shivendu Ranjan, Nandita Dasgupta, Raghvendra Kumar Mishra, Editor, Springer, pp.327-375, 2020
- V. **Use of Nanotechnological Methods for the Analysis and Stability of Food Antioxidants**
ÖZKAN G., Kamiloğlu S., ÇAPANOĞLU GÜVEN E., HIZAL YÜCESOY F. J., APAK M. R.
in: Handbook of Bioengineering-Volume:12 Impact of Nanoscience in the Food Industry, Grumezescu A.M. and Holban A.M., Editor, Elsevier, pp.311-350, 2018
- VI. **Evaluation of antioxidant activity/capacity measurement methods for food products**
ÇAPANOĞLU GÜVEN E., KAMİLOĞLU BEŞTEPE S., ÖZKAN G., APAK M. R.
in: Measurement of Antioxidant Activity and Capacity: Recent Trends and Applications, R. Apak, E. Capanoglu, F. Shahidi, Editor, John Wiley and Sons Ltd., Chichester, pp.273-286, 2018

Supported Projects

Çapanoğlu Güven E., Özkan G., Uğur E. S., Project Supported by Higher Education Institutions, Arı Ürünlerinde Bulunan Biyoaktif Bileşenlerin Farklı Enkapsülasyon Teknikleri ile Biyoyararlılığının Arttırılması ve Fonksiyonel Ürün Eldesi, 2022
- Continues

Metrics

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