

Res. Asst. Gizem Çatalkaya

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International Researcher IDs

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Education Information

Doctorate, İstanbul Technical University, Kimya-Metalurji, Gıda Mühendisliği, Turkey 2015 - 2022

Postgraduate, İstanbul Technical University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, Turkey 2013 - 2015

Undergraduate, Ege University, Faculty Of Engineering, Gıda Mühendisliği, Turkey 2008 - 2012

Dissertations

Doctorate, VALORIZATION OF BLACK CHOKEBERRY WASTE AS A POTENTIAL SOURCE OF BIOACTIVE COMPOUNDS: THEIR IDENTIFICATION, MICROENCAPSULATION AND IMPACT ON THE HUMAN GUT MICROBIOTA, İstanbul Technical University, Kimya-Metalurji, Gıda Mühendisliği, 2022

Postgraduate, IN VITRO BIOACCESSIBILITY OF ANTHOCYANINS IN BLACK CHOKEBERRY (ARONIA MELANOCARPA) ADDED YOGURTS, İstanbul Teknik Üniversitesi, Kimya Metalurji Fakültesi, Gıda Mühendisliği, 2015

Research Areas

Technical Sciences, Food Engineering, Food Science

Academic Titles / Tasks

Research Assistant, İstanbul Technical University, Kimya Metalurji Fakültesi, Gıda Mühendisliği, 2017 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of the impact of black chokeberry polyphenols in different matrices on the human gut microbiota using the in vitro model of the large intestine (TIM-2)**
Çatalkaya G., Çapanoğlu Güven E., Venema K.
JOURNAL OF BERRY RESEARCH, vol.0, no.0, pp.1-13, 2022 (SCI-Expanded)
- II. **Encapsulation of anthocyanin-rich extract from black chokeberry (Aronia melanocarpa) pomace by spray drying using different coating materials**
Çatalkaya G., Guldiken B., Çapanoğlu Güven E.
FOOD & FUNCTION, vol.13, no.22, pp.11579-11591, 2022 (SCI-Expanded)
- III. **Recent advances in metabolomic analyses of berry fruits and their in vivo metabolites**

- Çatalkaya G., Sieniawska E., Maciejewska-Turska M., Kai G., Çapanoğlu Güven E.
JOURNAL OF BERRY RESEARCH, vol.11, no.4, pp.531-554, 2021 (SCI-Expanded)
- IV. Role of Dietary Antioxidants in Neurodegenerative Diseases: Where are We Standing?**
Bakir S., Çatalkaya G., Ceylan F. D., Khan H., Guldiken B., Capanoglu E., Kamal M. A.
CURRENT PHARMACEUTICAL DESIGN, vol.26, no.7, pp.714-729, 2020 (SCI-Expanded)
- V. Cucurbita Plants: From Farm to Industry**
Salehi B., Sharifi-Rad J., Çapanoğlu Güven E., Adrar N., Çatalkaya G., Shaheen S., Jaffer M., Giri L., Suyal R., Jugran A. K., et al.
APPLIED SCIENCES-BASEL, vol.9, no.16, 2019 (SCI-Expanded)
- VI. Optimization of enzyme assisted extraction of lycopene from industrial tomato waste**
Çatalkaya G., Kahveci Karinçaoğlu D.
SEPARATION AND PURIFICATION TECHNOLOGY, vol.219, pp.55-63, 2019 (SCI-Expanded)
- VII. Cucurbits Plants: A Key Emphasis to Its Pharmacological Potential**
Salehi B., Çapanoğlu Güven E., Adrar N., Çatalkaya G., Shaheen S., Jaffer M., Giri L., Suyal R., Jugran A. K., Calina D., et al.
MOLECULES, vol.24, no.10, 2019 (SCI-Expanded)
- VIII. Effects of cooking and extra virgin olive oil addition on bioaccessibility of carotenes in tomato sauce**
Tomas M., SAĞDIÇ O., Çatalkaya G., KAHVECİ KARINCAOĞLU D., Çapanoğlu Güven E.
TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, vol.43, no.5, pp.478-484, 2019 (SCI-Expanded)
- IX. 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)
- X. Effect of dietary fibre addition in tomato sauce on the in vitro bioaccessibility of carotenoids**
Tomas M., SAĞDIÇ O., Çatalkaya G., Kahveci D., CAPANOGLU E.
QUALITY ASSURANCE AND SAFETY OF CROPS & FOODS, vol.10, no.3, pp.277-283, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. Enzim ön uygulamasının siyah üzüm ve ahududu sularının fiziksel ve kimyasal özellikleri, toplam fenolik madde içeriği ve toplam antioksidan kapasitesi üzerine etkisi**
Aydın E., Sarıkaya Ö., ÇATALKAYA G., KAHVECİ KARINCAOĞLU D.
Harran Tarım ve Gıda Bilimleri Dergisi, vol.22, pp.502-512, 2018 (Peer-Reviewed Journal)

Books & Book Chapters

- I. Separation of Polyphenols and Carotenoids Using Nanofiltration**
Kamiloğlu Beştepe S., Özdal T., Çatalkaya G., Çapanoğlu Güven E.
in: Membrane Separation of Food Bioactive Ingredients, S. M. Jafari, R. Castro-Munoz, Editor, Springer, London/Berlin , London, pp.205-238, 2022
- II. Chapter 3 - Innovations in functional foods development**
GÜLDİKEN B., GÜLSÜNOĞLU KONUŞKAN Z., BAKIR S., ÇATALKAYA G., ÇAPANOĞLU GÜVEN E., Nickersen M.
in: Food Technology Disruptions, Galanakis, Charis M., Editor, Academic Press , pp.73-130, 2021
- III. 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
- IV. 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

Supported Projects

Çapanoğlu Güven E., Çatalkaya G., Project Supported by Higher Education Institutions, SİYAH ARONYA (Aronia melanocarpa) POLİFENOLLERİ İLE BAĞIRSAK MİKROBİYOTASININ ETKİLEŞİMİNİN BİLGİSAYAR KONTROLLÜ DİNAMİK KOLON MODELİ (TIM-2) KULLANILARAK İNCELENMESİ, 2022 - 2023

Çapanoğlu Güven E., Çatalkaya G., Project Supported by Higher Education Institutions, Biyoaktif Bileşiklerin Potansiyel Bir Kaynağı Olarak Siyah Aronya Atığının Değerlendirilmesi: Tanımlanması, Mikrokapsülleme ve İnsan Bağırsak Mikrobiyotası Üzerindeki Etkisi, 2019 - 2023

Çelik S. E., Çatalkaya G., Çapanoğlu Güven E., CB Strateji ve Bütçe Başkanlığı (Kalkınma Bakanlığı) Projesi, Endüstriyel atıklardan kazanılan antosianinlerin mikroenkapsülasyonu ve işlenmiş gıdalarda kullanımı, 2018 - 2022

Çatalkaya G., TUBITAK Project, Domates Atıklarından Enzimler Yardımıyla Likopen Ekstraksiyonu, 2015 - 2017

Mobility Activity

Research Scholarship Program, Research During Graduate Education, Universiteit Maastricht, Netherlands, 2019 - 2020

Metrics

Publication: 28

Citation (WoS): 132

Citation (Scopus): 211

H-Index (WoS): 5

H-Index (Scopus): 6

Scholarships

YUDAB, YOK, 2019 - 2020

Awards

Çatalkaya G., Biotechnology Division Graduate Student Poster Competition, Institute Of Food Technologists, June 2020

Non Academic Experience

Maastricht University

Ghent Üniversitesi