

# Prof. MELTEM TÜRKYILMAZ

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## International Researcher IDs

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ScopusID: 57212056665

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## Education Information

Doctorate, Ankara University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, Turkey 2007 - 2011

Undergraduate, Ankara University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, Turkey 2003 - 2007

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, Düşük düzeylerde kükürtlenmiş kuru kayıpların değişik sıcaklıklarda depolanması sürecinde fiziksel, kimyasal ve mikrobiyolojik niteliklerindeki değişimler, Ankara University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2011

## Research Areas

Food Engineering

## Academic Titles / Tasks

Professor, Ankara University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2024 - Continues

Associate Professor, Ankara University, Gıda Güvenliği Enstitüsü, 2016 - 2024

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

- Increase in colour stability of pomegranate juice against 5-hydroxymethylfurfural (HMF) through copigmentation with phenolic acids**

TÜRKYILMAZ M., HAMZAOĞLU F., Ciftci R. B. A., ÖZKAN M.

JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.103, no.15, pp.7836-7848, 2023 (SCI-Expanded)

- II. **Clarification of pomegranate and strawberry juices: Effects of various clarification agents on turbidity, anthocyanins, colour, phenolics and antioxidant activity**  
Orhan Dereli B., Turkyilmaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.413, 2023 (SCI-Expanded)
- III. **Increase in thermal stability of strawberry anthocyanins with amino acid copigmentation**  
Bingol A., Turkyilmaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.384, 2022 (SCI-Expanded)
- IV. **Effects of fermentation time and pH on quality of black carrot juice fermented by kefir culture during storage**  
Kabakci S. A., Turkyilmaz M., ÖZKAN M.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.102, no.6, pp.2563-2574, 2022 (SCI-Expanded)
- V. **Influence of amino acid addition on the thermal stability of anthocyanins in pomegranate (*Punica granatum* L., cv. Hicaznar) and orange (*Citrus sinensis* L. Osbeck, cv. Valencia) juice blend**  
Turkyilmaz M., HAMZAOĞLU F., Unal H., ÖZKAN M.  
FOOD CHEMISTRY, vol.370, 2022 (SCI-Expanded)
- VI. **Changes in anthocyanins and colour of black mulberry (*Morus nigra*) juice during clarification and pasteurization**  
AŞKIN B., Turkyilmaz M., ÖZKAN M., KÜÇÜKÖNER E.  
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.16, no.1, pp.784-792, 2022 (SCI-Expanded)
- VII. **Effects of pasteurization and storage on turbidity and copigmentation in pomegranate juices clarified with various hydrocolloid combinations**  
Turkyilmaz M., Hamzaog F., ÖZKAN M.  
FOOD CHEMISTRY, vol.358, 2021 (SCI-Expanded)
- VIII. **Degradation kinetics of bioactive compounds and antioxidant activity in strawberry juice concentrate stored at high and low temperatures**  
Menevseoglu A., Diblan S., Turkyilmaz M., ÖZKAN M.  
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.14, no.5, pp.2611-2622, 2020 (SCI-Expanded)
- IX. **Changes in the quality of kefir fortified with anthocyanin-rich juices during storage**  
Kabakci S. A., Turkyilmaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.326, 2020 (SCI-Expanded)
- X. **Natural hydrocolloids in the food sector - Recent applications beyond conventional uses**  
Yemenicioglu A., Farris S., Turkyilmaz M., Gulec S.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.55, no.4, pp.1387-1388, 2020 (SCI-Expanded)
- XI. **Color and stability of anthocyanins in strawberry nectars containing various co-pigment sources and sweeteners**  
ERTAN K., Turkyilmaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.310, 2020 (SCI-Expanded)
- XII. **Combined use of hydrocolloids in pomegranate juice and their effects on clarification and copigmentation**  
Turkyilmaz M., HAMZAOĞLU F., ÖZKAN M.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.55, no.4, pp.1426-1436, 2020 (SCI-Expanded)
- XIII. **A review of current and future food applications of natural hydrocolloids**  
Yemenicioglu A., Farris S., Turkyilmaz M., Gulec S.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.55, no.4, pp.1389-1406, 2020 (SCI-Expanded)
- XIV. **Effects of natural copigment sources in combination with sweeteners on the stability of anthocyanins in sour cherry nectars**  
ERTAN K., Turkyilmaz M., ÖZKAN M.

- FOOD CHEMISTRY, vol.294, pp.423-432, 2019 (SCI-Expanded)
- XV. **Effects of sucrose and copigment sources on the major anthocyanins isolated from sour cherries**  
Turkyilmaz M., HAMZAOĞLU F., ÖZKAN M.  
FOOD CHEMISTRY, vol.281, pp.242-250, 2019 (SCI-Expanded)
- XVI. **Effect of SO<sub>2</sub> on sugars, indicators of Maillard reaction, and browning in dried apricots during storage**  
HAMZAOĞLU F., Turkyilmaz M., ÖZKAN M.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.98, no.13, pp.4988-4999, 2018 (SCI-Expanded)
- XVII. **Effect of sweeteners on anthocyanin stability and colour properties of sour cherry and strawberry nectars during storage**  
ERTAN K., Turkyilmaz M., ÖZKAN M.  
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.55, no.10, pp.4346-4355, 2018 (SCI-Expanded)
- XVIII. **Changes in polyphenol profile of dried apricots containing SO<sub>2</sub> at various concentrations during storage**  
Altindag M., Turkyilmaz M., ÖZKAN M.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.98, no.7, pp.2530-2539, 2018 (SCI-Expanded)
- XIX. **Amino acid profile and content of dried apricots containing SO<sub>2</sub> at different concentrations during storage**  
Hamzaoglu F., Turkyilmaz M., ÖZKAN M.  
QUALITY ASSURANCE AND SAFETY OF CROPS & FOODS, vol.10, no.4, pp.361-369, 2018 (SCI-Expanded)
- XX. **Effects of sulfur dioxide concentration on organic acids and beta-carotene in dried apricots during storage**  
Salur-Can A., Turkyilmaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.221, pp.412-421, 2017 (SCI-Expanded)
- XXI. **Colour stabilities of sour cherry juice concentrates enhanced with gallic acid and various plant extracts during storage**  
Navruz A., Turkyilmaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.197, pp.150-160, 2016 (SCI-Expanded)
- XXII. **Effects of various protein- and polysaccharide-based clarification agents on antioxidative compounds and colour of pomegranate juice**  
Erkan-Koc B., Turkyilmaz M., YEMİŞ O., ÖZKAN M.  
FOOD CHEMISTRY, vol.184, pp.37-45, 2015 (SCI-Expanded)
- XXIII. **Effects of Clarification and Pasteurization on the Phenolics, Antioxidant Capacity, Color Density and Polymeric Color of Black Carrot (*Daucus Carota*L.) Juice**  
Dereli U., Turkyilmaz M., Yemis O., ÖZKAN M.  
JOURNAL OF FOOD BIOCHEMISTRY, vol.39, no.5, pp.528-537, 2015 (SCI-Expanded)
- XXIV. **Effects of different sorbic acid and moisture levels on chemical and microbial qualities of sun-dried apricots during storage**  
Alagoz S., Turkyilmaz I., TAĞI Ş., ÖZKAN M.  
FOOD CHEMISTRY, vol.174, pp.356-364, 2015 (SCI-Expanded)
- XXV. **Effects of condensed tannins on anthocyanins and colour of authentic pomegranate (*Punica granatum* L.) juices**  
Turkplrnaz M., ÖZKAN M.  
FOOD CHEMISTRY, vol.164, pp.324-331, 2014 (SCI-Expanded)
- XXVI. **Changes in hydrolysable and condensed tannins of pomegranate (*Punica granatum* L., cv. Hicaznar) juices from sacs and whole fruits during production and their relation with antioxidant activity**  
Muhacir-Guzel N., Turkyilmaz M., Yemis O., TAĞI Ş., ÖZKAN M.  
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.59, no.2, pp.933-940, 2014 (SCI-Expanded)
- XXVII. **Loss of sulfur dioxide and changes in some chemical properties of Malatya apricots (*Prunus armeniaca* L.) during sulfuring and drying**  
Turkyilmaz M., ÖZKAN M., GÜZEL N.

- JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.94, no.12, pp.2488-2496, 2014 (SCI-Expanded)
- XXVIII. **Effects of various sulphuring methods and storage temperatures on the physical and chemical quality of dried apricots**  
Coskun A. L., Turkyilmaz M., Aksu O. T., Koc B. E., Yemis O., ÖZKAN M.  
FOOD CHEMISTRY, vol.141, no.4, pp.3670-3680, 2013 (SCI-Expanded)
- XXIX. **Anthocyanin and organic acid profiles of pomegranate (*Punica granatum* L.) juices from registered varieties in Turkey**  
Turkyilmaz M.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, no.10, pp.2086-2095, 2013 (SCI-Expanded)
- XXX. **Effects of various pressing programs and yields on the antioxidant activity, antimicrobial activity, phenolic content and colour of pomegranate juices**  
Turkyilmaz M., TAĞI Ş., Dereli U., ÖZKAN M.  
FOOD CHEMISTRY, vol.138, no.2-3, pp.1810-1818, 2013 (SCI-Expanded)
- XXXI. **Changes in Chemical and Microbial Qualities of Dried Apricots Containing Sulphur Dioxide at Different Levels During Storage**  
Turkyilmaz M., TAĞI Ş., ÖZKAN M.  
FOOD AND BIOPROCESS TECHNOLOGY, vol.6, no.6, pp.1526-1538, 2013 (SCI-Expanded)
- XXXII. **Kinetics of anthocyanin degradation and polymeric colour formation in black carrot juice concentrates during storage**  
Turkyilmaz M., ÖZKAN M.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.47, no.11, pp.2273-2281, 2012 (SCI-Expanded)
- XXXIII. **Clarification and pasteurisation effects on monomeric anthocyanins and percent polymeric colour of black carrot (*Daucus carota* L.) juice**  
Turkyilmaz M., Yemis O., ÖZKAN M.  
FOOD CHEMISTRY, vol.134, no.2, pp.1052-1058, 2012 (SCI-Expanded)
- XXXIV. **Effects of Clarification and Storage on Anthocyanins and Color of Pomegranate Juice Concentrates**  
Turfan O., Turkyilmaz M., Yemis O., ÖZKAN M.  
JOURNAL OF FOOD QUALITY, vol.35, no.4, pp.272-282, 2012 (SCI-Expanded)
- XXXV. **Anthocyanin and colour changes during processing of pomegranate (*Punica granatum* L., cv. Hicaznar) juice from sacs and whole fruit**  
Turfan O., Turkyilmaz M., Yemis O., ÖZKAN M.  
FOOD CHEMISTRY, vol.129, no.4, pp.1644-1651, 2011 (SCI-Expanded)

## Supported Projects

- Turkyilmaz M., Özkan M., TÜBİTAK Project, Nar Sularında Bulanıklık, Tortu Oluşumu, Burukluk ve Renk Stabilitesi Üzerine Tannaz, Laktonaz ve Proteaz Aktivitesinin Etkisi, 2020 - 2023
- Turkyilmaz M., TÜBİTAK Project, Kayısların kükürtlemesinde kullanılacak kükürtleme odasının tasarımı ve kükürtleme parametrelerinin belirlenmesi, 2020 - 2022
- Turkyilmaz M., Project Supported by Higher Education Institutions, Çilek ve nar sularının sıcak durultma yöntemiyle durultulması, 2020 - 2022
- Turkyilmaz M., TÜBİTAK Project, Vişne nektarlarının renginin ve renk stabilitesinin kopigmentasyon etkisi ile artırılması ve depolama boyunca renkte meydana gelen değişimler, 2015 - 2017
- Turkyilmaz M., TÜBİTAK Project, Kayısların güneşte kurutulması ve farklı sıcaklıklarda depolanması sürelerinde meydana gelen esmerleşme üzerine SO<sub>2</sub> konsantrasyonu polifenol oksidaz aktivitesi ve kayısı bileşenlerinin etkisi, 2014 - 2016
- TÜBİTAK Project, Karadut antosiyaninlerinin ısı ve depolama stabilitesinin saptanması ve karadutun bazı kimyasal ve antimikrobiyal niteliklerinin belirlenmesi, 2011 - 2013