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Education Information

- I. Post Doctorate, National University of Ireland, University College Cork, School of Food and Nutritional Sciences, Ireland 2009 - 2010
- II. Post Doctorate, National University of Ireland, University College Cork, Department of Food and Nutritional Sciences, Ireland 2006 - 2006
- III. Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği A.B.D., Turkey 1998 - 2004
- IV. Doctorate, University of Reading, Food Science and Technology , United Kingdom 2000 - 2000
- V. Postgraduate, Trakya University, Institute for Graduate School of Science and Engineering, Food Engineering, Turkey 1994 - 1997
- VI. Undergraduate, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey 1987 - 1992

Foreign Languages

- I. English, B2 Upper Intermediate

Dissertations

- I. Doctorate, Detection of bitter peptides cause bitterness in Kashar and white cheese and the investigation of possible effects of storage conditions and starter microorganisms on bitterness, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2004
- II. Postgraduate, A research on the use of skimmed milk powders sold in Ankara market in yoghurt production, Tekirdağ Namık Kemal University, Food Engineering Department, 1997

Research Areas

Food Engineering, Food Science, Food Chemistry, Food Regulations and Quality Control, Food Technology, Food Analysis

Academic Titles / Tasks

- I. Professor, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2021 - Continues
- II. Associate Professor, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2011 - 2021
- III. Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2007 - 2012
- IV. Lecturer, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2004 - 2007
- V. Research Assistant, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 1998 - 2004

Academic and Administrative Experience

- I. Fakülte Kurulu Üyesi, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2021 - Continues
- II. Hacettepe Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2012 - Continues
- III. Fakülte Yönetim Kurulu Üyesi, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2013 - 2021
- IV. Hacettepe Üniversitesi, Mühendislik Fakültesi, Gıda Mühendisliği Bölümü, 2008 - 2009

Supervised Theses

- I. TOPCU A., UTILIZATION OF CAMEL CHYMOSIN IN THE PRODUCTION OF REDUCED FAT ULTRAFILTRATED WHITE CHEESE AND ITS EFFECT ON CHEESE QUALITY, Postgraduate, R.GHAVAM(Student), 2017
- II. TOPCU A., Utilization of commercial adjunct culture in the manufacture of ultrafiltrated white cheese and its effects on the cheese properties, Postgraduate, S.EGHBALIAN(Student), 2017
- III. TOPCU A., Antibiyotik tayinine yönelik biyosensör geliştirilmesi, Doctorate, N.NUR(Student), 2017
- IV. TOPCU A., Oksidasyon-redüksiyon potansiyelinin ultrafiltre beyaz peynirin olgunlaşma süreci üzerine etkisi, Doctorate, T.BULAT(Student), 2017
- V. TOPCU A., Yağı azaltılmış minyatür ultrafiltre beyaz peynir üretiminde protein-glutaminaz kullanımı ve bunun peynir kalitesi üzerine etkisi, Postgraduate, M.MOLLAZADEH(Student), 2016
- VI. TOPCU A., Beyaz peynir üretiminde probiyotik Enterococcus faecium'un ek kültür olarak kullanımı ve bunun oksidasyon-redüksiyon potansiyeli ve peynir kalitesi üzerine etkisi, Postgraduate, T.BULAT(Student), 2011
- VII. TOPCU A., Beyaz peynir üretiminde rennet macunu kullanımı ve peynir kalitesi üzerine etkisi, Postgraduate, E.KAYA(Student), 2011
- VIII. TOPCU A., BOYACI İ. H., Yüzeyde güçlendirilmiş raman spektroskopisi (YGRS) tekniği ile proteaz aktivitesi tayini, Postgraduate, N.NUR(Student), 2011
- IX. TOPCU A., Peynir üretiminde starter kültürlerine ek olarak bazı bakteri suşlarının kullanımı ve bunun peynir özelliklerine etkisi, Postgraduate, R.WİSHAH(Student), 2007
- X. TOPCU A., Coğrafi işaret olarak tescil edilmiş malatya kayısının teknolojik özelliklerinin saptanması ve gıda güvenliği açısından araştırılması, Doctorate, E.BETÜL(Student), 2006

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Surface-enhanced Raman scattering-based detection of plasmin activity by specific peptide substrate**
Yazgan N. N., Bulat T., Topcu A., Dudak F. C., Boyaci I. H., Tamer U.

FOOD CHEMISTRY, vol.372, 2022 (SCI-Expanded)

- II. **Effect of heat treatment on micronutrients, fatty acids and some bioactive components of milk**
Kılıç Akyılmaz M., Ozer B., BULAT T., TOPCU A.
INTERNATIONAL DAIRY JOURNAL, vol.126, 2022 (SCI-Expanded)
- III. **Influences of oxidation-reduction potential on kefir: Microbial counts, organic acids, volatile compounds and sensory properties**
BULAT T., TOPCU A.
LWT, vol.144, 2021 (SCI-Expanded)
- IV. **Discrimination of milk species using Raman spectroscopy coupled with partial least squares discriminant analysis in raw and pasteurized milk**
Yazgan N. N., Genis H. E., BULAT T., TOPCU A., Durna S., Yetisemiyen A., BOYACI İ. H.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.100, no.13, pp.4756-4765, 2020 (SCI-Expanded)
- V. **Oxidation-reduction potential of UF white cheese: Impact on organic acids, volatile compounds and sensorial properties**
BULAT T., TOPCU A.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.131, 2020 (SCI-Expanded)
- VI. **Process design for processed Kashar cheese (a pasta-filata cheese) by means of microbial transglutaminase: Effect on physical properties, yield and proteolysis**
TOPCU A., BULAT T., Ozer B.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.125, 2020 (SCI-Expanded)
- VII. **Development of a green fluorescence protein (GFP)-based bioassay for detection of antibiotics and its application in milk**
KARAÇAĞLAR N. N., TOPCU A., DUDAK ŞEKER F. C., BOYACI İ. H.
JOURNAL OF FOOD SCIENCE, vol.85, no.2, pp.500-509, 2020 (SCI-Expanded)
- VIII. **The effect of oxidation-reduction potential on the characteristics of UF white cheese produced using single strains of Lactococcus lactis**
BULAT T., TOPCU A.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.109, pp.296-304, 2019 (SCI-Expanded)
- IX. **Raman spectroscopy coupled with chemometric methods for the discrimination of foreign fats and oils in cream and yogurt**
Karacaglar N. N., BULAT T., BOYACI İ. H., TOPCU A.
JOURNAL OF FOOD AND DRUG ANALYSIS, vol.27, no.1, pp.101-110, 2019 (SCI-Expanded)
- X. **Use of Raman spectroscopy for determining erucic acid content in canola oil**
Velioglu S. D., TEMİZ H. T., Ercioglu E., Velioglu H. M., TOPCU A., BOYACI İ. H.
FOOD CHEMISTRY, vol.221, pp.87-90, 2017 (SCI-Expanded)
- XI. **Determination of whey adulteration in milk powder by using laser induced breakdown spectroscopy**
Bilge G., Sezer B., Eseller K. E., Berberoglu H., TOPCU A., BOYACI İ. H.
FOOD CHEMISTRY, vol.212, pp.183-188, 2016 (SCI-Expanded)
- XII. **Raman Spectroscopic Barcode Use for Differentiation of Vegetable Oils and Determination of Their Major Fatty Acid Composition**
Velioglu S. D., Ercioglu E., TEMİZ H. T., Velioglu H. M., TOPCU A., BOYACI İ. H.
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.93, no.5, pp.627-635, 2016 (SCI-Expanded)
- XIII. **Rapid analysis of glucose, fructose and sucrose contents of commercial soft drinks using Raman spectroscopy**
ILASLAN K., BOYACI İ. H., TOPCU A.
FOOD CONTROL, vol.48, pp.56-61, 2015 (SCI-Expanded)
- XIV. **Use of corn oil in the production of Turkish white cheese**
Arslan S., TOPCU A., Saldamli I., Koksali G.
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.51, no.10, pp.2382-2392, 2014 (SCI-Expanded)
- XV. **Monitoring multiple components in vinegar fermentation using Raman spectroscopy**
Uysal R. S., Soykut E. A., BOYACI İ. H., TOPCU A.

- FOOD CHEMISTRY, vol.141, no.4, pp.4333-4343, 2013 (SCI-Expanded)
- XVI. **Rapid analysis of sugars in honey by processing Raman spectrum using chemometric methods and artificial neural networks**
Ozbalci B., BOYACI İ. H., TOPCU A., KADILAR C., Tamer U.
FOOD CHEMISTRY, vol.136, pp.1444-1452, 2013 (SCI-Expanded)
- XVII. **Detection of melamine in milk by surface-enhanced Raman spectroscopy coupled with magnetic and Raman-labeled nanoparticles**
Yazgan N. N., Boyaci I. H., Topcu A., Tamer U.
ANALYTICAL AND BIOANALYTICAL CHEMISTRY, vol.403, no.7, pp.2009-2017, 2012 (SCI-Expanded)
- XVIII. **Ripening of cheese: oxidation-reduction potential and calcium phosphate**
McSweeney P. L. H., Caldeo V., Topcu A., Cooke D. R.
AUSTRALIAN JOURNAL OF DAIRY TECHNOLOGY, vol.65, no.3, pp.178-184, 2010 (SCI-Expanded)
- XIX. **A high sensitive assay platform based on surface-enhanced Raman scattering for quantification of protease activity**
Yazgan N. N., BOYACI İ. H., Temur E., Tamer U., Topcu A.
TALANTA, vol.82, no.2, pp.631-639, 2010 (SCI-Expanded)
- XX. **Detoxification of aflatoxin B-1 and patulin by Enterococcus faecium strains**
TOPCU A., BULAT T., Wishah R., BOYACI İ. H.
INTERNATIONAL JOURNAL OF FOOD MICROBIOLOGY, vol.139, no.3, pp.202-205, 2010 (SCI-Expanded)
- XXI. **Roasting-Related Changes in Oxidative Stability and Antioxidant Capacity of Apricot Kernel Oil**
Durmaz G., KARABULUT İ., TOPCU A., Asilturk M., Kutlu T.
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.87, no.4, pp.401-409, 2010 (SCI-Expanded)
- XXII. **Utilization of Interesterified Fat in the Production of Turkish White Cheese**
Arslan S., TOPCU A., Saldamli I., Koksal G.
FOOD SCIENCE AND BIOTECHNOLOGY, vol.19, no.1, pp.89-98, 2010 (SCI-Expanded)
- XXIII. **Removal of Cadmium and Lead from Aqueous Solution by Enterococcus faecium Strains**
TOPCU A., BULAT T.
JOURNAL OF FOOD SCIENCE, vol.75, no.1, 2010 (SCI-Expanded)
- XXIV. **The effect of fat replacers on chemical and textural properties of white brined cheese**
Arslan S., TOPCU A., Saldamli I.
MILCHWISSENSCHAFT-MILK SCIENCE INTERNATIONAL, vol.65, no.3, pp.277-280, 2010 (SCI-Expanded)
- XXV. **Trans Fatty Acids and Fatty Acid Composition of Mature Breast Milk in Turkish Women and Their Association with Maternal Diet's**
Samur G., TOPCU A., Turan S.
LIPIDS, vol.44, no.5, pp.405-413, 2009 (SCI-Expanded)
- XXVI. **Simple Determination of Histamine in Cheese by Capillary Electrophoresis with Diode Array Detection**
Numanoglu E., BOYACI İ. H., TOPCU A.
JOURNAL OF FOOD AND DRUG ANALYSIS, vol.16, no.6, pp.74-80, 2008 (SCI-Expanded)
- XXVII. **Measurement of the oxidation-reduction potential of cheddar cheese**
TOPCU A., McKinnon I., McSweeney P. L. H.
JOURNAL OF FOOD SCIENCE, vol.73, no.3, 2008 (SCI-Expanded)
- XXVIII. **Some compositional properties of main Malatya apricot (Prunus armeniaca L.) varieties**
Akin E. B., KARABULUT İ., TOPCU A.
FOOD CHEMISTRY, vol.107, no.2, pp.939-948, 2008 (SCI-Expanded)
- XXIX. **Obtaining butter oil triacylglycerols free from beta-carotene and alpha-tocopherol via activated carbon adsorption and alumina-column chromatography treatments**
KARABULUT İ., TOPCU A., Akmil-Basar C., ÖNAL Y., Lampi A.
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.85, no.3, pp.213-219, 2008 (SCI-Expanded)
- XXX. **Fatty acid, triacyl glycerol, phytosterol, and tocopherol variations in kernel oil of Malatya apricots from Turkey**

- Turan S., TOPCU A., KARABULUT İ., VURAL H., HAYALOĞLU A. A.
JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, vol.55, no.26, pp.10787-10794, 2007 (SCI-Expanded)
- XXXI. **Effect of hot air drying and sun drying on color values and beta-carotene content of apricot (*Prunus armenica* L.)**
Karabulut I., Topcu A., Duran A., Turan S., Ozturk B.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.40, no.5, pp.753-758, 2007 (SCI-Expanded)
- XXXII. **Determination of nitrate and nitrite content of Turkish cheeses**
Topcu A., Topcu A. A., Saldamli I., Yurttaguel M.
AFRICAN JOURNAL OF BIOTECHNOLOGY, vol.5, no.15, pp.1411-1414, 2006 (SCI-Expanded)
- XXXIII. **The effect of Ramadan on maternal nutrition and composition of breast milk**
Rakicioglu N., Samur G., Topcu A., Topcu A.
PEDIATRICS INTERNATIONAL, vol.48, no.3, pp.278-283, 2006 (SCI-Expanded)
- XXXIV. **Proteolysis and storage stability of UHT milk produced in Turkey**
Topcu A., Numanoglu E., Saldamli I.
INTERNATIONAL DAIRY JOURNAL, vol.16, no.6, pp.633-638, 2006 (SCI-Expanded)
- XXXV. **Determination of Nitrate and Nitrite Content of Turkish Cheeses**
TOPCU A., AYAZ A., Saldamli İ., YURTTAGÜL S. M.
AFRICAN JOURNAL OF BIOTECHNOLOGY, vol.5, no.15, pp.1411-1414, 2006 (SCI-Expanded)
- XXXVI. **Statistical modeling of beta-galactosidase inhibition during lactose hydrolysis**
Boyaci I., Bas D., Dudak F., Topcu A., Saldamli I., Seker U., Tamerler C.
FOOD BIOTECHNOLOGY, vol.20, no.1, pp.79-91, 2006 (SCI-Expanded)
- XXXVII. **Proteolytical, chemical, textural and sensorial changes during the ripening of Turkish white cheese made of pasteurized cows' milk**
Topcu A., Saldamli I.
INTERNATIONAL JOURNAL OF FOOD PROPERTIES, vol.9, no.4, pp.665-678, 2006 (SCI-Expanded)
- XXXVIII. **Effects of the industrial refining process on some properties of hazelnut oil**
Karabulut I., Topcu A., Yorulmaz A., Tekin A., Ozay D.
EUROPEAN JOURNAL OF LIPID SCIENCE AND TECHNOLOGY, vol.107, pp.476-480, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Survey of Nitrate and Nitrite Levels of Fresh Vegetables in Turkey**
AYAZ A., TOPCU A., YURTTAGÜL S. M.
Journal of Food Technology, no.5(2), pp.177, 2007 (Peer-Reviewed Journal)

Metrics

Publication: 54
Citation (WoS): 1226
Citation (Scopus): 1415
H-Index (WoS): 19
H-Index (Scopus): 20

Non Academic Experience

- I. University College Cork, School of Food and Nutritional Sciences, IRELAND, Araştırmacı
- II. University College Cork, Department of Food and Nutritional Sciences, IRELAND, Araştırmacı
- III. The University of Reading, Food Science and Technology Department, UK, Araştırmacı

- IV. Hacettepe Üniv. Gıda Müh. Böl. Entegre Pilot işletmesi, Gıda Mühendisi
- V. Birtat Süt ve Mamülleri A.Ş, Gıda Mühendisi
- VI. Malkara Birlik Süt İşletmesi, Gıda Mühendisi