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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gıda Mühendisliği Abd, Turkey
2013 - 2017

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği Abd, Turkey 2010 - 2013

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey 2004 - 2009

Research Areas

Food Engineering, Food Technology, Cereals Technology, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Food Engineering, 2018 - Continues

Research Assistant PhD, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Food Engineering, 2017 - 2018

Research Assistant, Yildiz Technical University, Faculty Of Chemical And Metallurgical Engineering, Department Of Food Engineering, 2014 - 2018

Academic and Administrative Experience

Ziyaretçi Araştırmacı, Quadram Institute, 2022 - 2022

Courses

Gıda Güvenliği Yönetim Sistemi, Undergraduate, 2020 - 2021

Fırıncılık Ürünleri Teknolojisi, Doctorate, 2018 - 2019

Tahıl ve Ürünleri Teknolojisi, Undergraduate, 2018 - 2019

Kütle ve Enerji Denklıkları, Undergraduate, 2018 - 2019

Gıda Ürünlerinin Geliştirilmesi, Undergraduate, 2018 - 2019, 2017 - 2018

Advising Theses

Özülkü G., Tam Buğday Unlu Ekşi Hamurunun Bisküvi Üretiminde Kullanımının Bisküvi Kalite Özelliklerine Etkisi, Postgraduate, T.ALİOĞLU(Student), 2019

Özülkü G., Keçiboynuzu Unu İlavesinin Ekşi Hamur Fermentasyonuna Etkisi, Postgraduate, S.KARLIDAĞ(Student), 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Monitoring the Dough Properties, Quality Characteristics and Volatile Compounds of Whole Wheat Bread Made by Different Sourdough Types during Frozen Storage**
ÖZÜLKÜ G.
Foods, vol.13, no.9, 2024 (SCI-Expanded)
- II. **Technological quality, bioactive features, and glycemic index of gluten-free cakes formulated with lyophilized wild *Prunus spinosa* fruit**
Cakir E., ÖZÜLKÜ G., BEKİROĞLU H., ARICI M., SAĞDIÇ O.
Quality Assurance and Safety of Crops and Foods, vol.16, no.2, pp.1-11, 2024 (SCI-Expanded)
- III. **Effects of Fish Skin Gelatin Hydrolysates Treated with Alcalase and Savinase on Frozen Dough and Bread Quality**
Tekle S., ÖZÜLKÜ G., Bekiroglu H., SAĞDIÇ O.
Foods, vol.13, no.1, 2024 (SCI-Expanded)
- IV. **Effects of Casein Hydrolysate Prepared with Savinase on the Quality of Bread Made by Frozen Dough**
BEKİROĞLU H., ÖZÜLKÜ G., SAĞDIÇ O.
Foods, vol.12, no.20, 2023 (SCI-Expanded)
- V. **POSSIBILITY OF USING BLACK OLIVE SEED POWDER IN FORMULATIONS TO FUNCTIONALIZE BREAD**
Cakir E., Yıldırım R., Pour N., Özülkü G., Toker Ö. S., Arıcı M.
Latin American Applied Research, vol.53, no.4, pp.395-401, 2023 (SCI-Expanded)
- VI. **Impact of grape marc, as a partial replacer of sugar and wheat flour, on the bioaccessibility of polyphenols, technological, sensory, and quality properties of cake by mixture design approach**
Bursa K., Isik G., METİN YILDIRIM R., ÖZÜLKÜ G., Kian-Pour N., TOKER Ö. S., PALABIYIK İ., Gulcu M.
INTERNATIONAL JOURNAL OF FOOD ENGINEERING, vol.18, no.8-9, pp.611-626, 2022 (SCI-Expanded)
- VII. **Antioxidant Capacity and Profiles of Phenolic Acids in Various Genotypes of Purple Wheat**
P. Shamanin V., Tekin Çakmak Z. H., I. Gordeeva E., Karasu S., Pototskaya I., S. Chursin A., E. Pozherukova V., Özülkü G., I. Morgounov A., Sağdıç O., et al.
FOODS, vol.11, no.16, pp.1-14, 2022 (SCI-Expanded)
- VIII. **EFFECT OF SUGAR MIXTURES WITH DIFFERENT TYPES ON RHEOLOGICAL, PHYSICOCHEMICAL AND SENSORIAL QUALITY OF BISCUITS**
ÖZÜLKÜ G., Ozcan O., Sener D., Atalay A., KARASU S., SAĞDIÇ O.
Latin American Applied Research, vol.52, no.4, pp.359-364, 2022 (SCI-Expanded)
- IX. **Evaluation of whole wheat flour sourdough as a promising ingredient in short dough biscuits**
Alioğlu T., Özülkü G.
FOOD SCIENCE AND TECHNOLOGY, pp.1009-1016, 2021 (SCI-Expanded)
- X. **Potential probiotic lactic acid bacteria isolated from fermented gilaburu and shalgam beverages**
Akman P. K., Özülkü G., Törnük F., Yetim H.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.149, pp.111705, 2021 (SCI-Expanded)
- XI. **The effect of taro-wheat flour and taro-gluten free flour on cake batters and quality**
Arıcı M., Özülkü G., Kahraman B., Metin Yıldırım R., Toker Ö. S.
Journal of Food Measurement and Characterization, vol.15, no.1, pp.531-540, 2021 (SCI-Expanded)
- XII. **Taro flour usage in wheat flour bread and gluten-free bread: Evaluation of rheological, technological and some nutritional properties**
Arıcı M., Özülkü G., Kahraman B., Yıldırım R., Toker Ö. S.
JOURNAL OF FOOD PROCESS ENGINEERING, vol.43, no.9, 2020 (SCI-Expanded)

- XIII. **IMPROVING THE BREAD QUALITY OF SUNI-BUG DAMAGED WHEAT FLOURS BY SOURDOUGH BREADMAKING AND LIQUID RYE SOUR**
Özülkü G., Sivri Özay D.
Acta Alimentaria, vol.49, no.2, pp.170-180, 2020 (SCI-Expanded)
- XIV. **The effect of invertase concentration on quality parameters of fondant**
Ozcan O., Yildirim R., Toker Ö. S., Akbas N., Özülkü G., Yaman M.
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.56, no.9, pp.4242-4250, 2019 (SCI-Expanded)
- XV. **Investigating the usage of unsaturated fatty acid-rich and low-calorie oleogels as a shortening mimetics in cake**
Pehlivanoglu H., ÖZÜLKÜ G., YILDIRIM R. M., Demirci M., TOKER Ö. S., SAĞDIÇ O.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.42, no.6, 2018 (SCI-Expanded)
- XVI. **Biodiversity and technological properties of yeasts from Turkish sourdough**
Arıcı M., Özülkü G., Yildirim R. M., Sağdıç O., Durak M. Z.
FOOD SCIENCE AND BIOTECHNOLOGY, vol.27, pp.499-508, 2018 (SCI-Expanded)
- XVII. **Bioactive and bioaccessibility characteristics of honeybee pollens collected from different regions of Turkey**
OZKAN K., SAGCAN N., ÖZÜLKÜ G., SAĞDIÇ O., TOKER Ö. S., Muz M. N.
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.12, no.1, pp.581-587, 2018 (SCI-Expanded)
- XVIII. **Rapid detection of adulteration of cold pressed sesame oil adulterated with hazelnut, canola, and sunflower oils using ATR-FTIR spectroscopy combined with chemometric**
Özülkü G., Yildirim R. M., Toker Ö. S., Karasu S., Durak M. Z.
Food Control, vol.82, pp.212-216, 2017 (SCI-Expanded)
- XIX. **Characterization of the rheological and technological properties of the frozen sourdough bread with chickpea flour addition**
Özülkü G., Arıcı M.
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.11, pp.1493-1500, 2017 (SCI-Expanded)
- XX. **Modeling of Bioactive Compound Content of Different Tea Bags: Effect of Steeping Temperature and Time**
YILDIRIM R. M., ÖZÜLKÜ G., TOKER Ö. S., Baslar M., DURAK M. Z., SAĞDIÇ O.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.41, no.1, 2017 (SCI-Expanded)
- XXI. **Physicochemical and nutritional properties of taro (Colocasia esculenta L. Schott) flour as affected by drying temperature and air velocity**
ARICI M., YILDIRIM R. M., ÖZÜLKÜ G., YASAR B., TOKER Ö. S.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.74, pp.434-440, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Carob Flour Addition to Sourdough: Effect of Sourdough Fermentation, Dough Rheology and Bread Quality**
Karlıdağ S., Arıcı M., Özülkü G.
Journal of Tekirdag Agricultural Faculty, vol.19, no.3, pp.541-553, 2022 (Peer-Reviewed Journal)
- II. **Durum Buğdayı Ununun Ekmek Üretiminde Kullanım İmkanlarının Araştırılması**
ÖZÜLKÜ G.
Avrupa Bilim ve Teknoloji Dergisi, no.38, pp.130-136, 2022 (Peer-Reviewed Journal)
- III. **Effect of Addition of Fig Seed Cold Press Oil Byproduct on Physicochemical, Sensory, Textural and Bioactive Properties of Bread**
ÇAKIR E., METİN YILDIRIM R., ÖZÜLKÜ G., TÖRNÜK F., TOKER Ö. S., SAĞDIÇ O., ARICI M.
European Food Science and Engineering, vol.2, no.2, pp.59-64, 2021 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Ekşi Hamur ile Ekmek Üretim Teknolojisi**
Sağdıç O., Arıcı M., Özülkü G., Metin Yıldırım R.
in: Hububat Bilimi ve Teknolojisi, Hamit Köksel, Oğuz Acar, Buket Çetiner, Filiz Köksel, Editor, Sidas Medya, İzmir, pp.335-353, 2021
- II. **Ekşi Hamur ile Ekmek Üretim Teknolojisi**
Sağdıç O., Arıcı M., Özülkü G., Metin Yıldırım R.
in: Hububat Bilimi ve Teknolojisi, Hamit Köksel, Oğuz Acar, Buket Çetiner, Filiz Köksel, Editor, Sidas Yayıncılık, İzmir, pp.335-353, 2021
- III. **Ekşi hamur fermentasyonu ve teknolojisi**
SAĞDIÇ O., ARICI M., ÖZÜLKÜ G.
in: Fermente Ürünler Teknolojisi ve Mikrobiyolojisi, Osman Erkmen, Hüseyin Erten, Hidayet Sağlam, Editor, Nobel Yayın, İstanbul, pp.369-390, 2020

Refereed Congress / Symposium Publications in Proceedings

- I. **Using Ultrasound in The Thawing Process of Frozen Doughs**
Çepiç M., ÖZÜLKÜ G.
International Aegean Scientific Research Symposium 2021, 25 - 26 December 2021
- II. **INVESTIGATION OF PHYSICOCHEMICAL, TECHNOLOGICAL AND BIOACTIVE PROPERTIES OF IMMATURE AND MATURE WHOLE EINKORN WHEAT**
Erkölençik M. F., Arıcı M., Kahraman B., Tulukçu E., Özülkü G., Sağdıç O.
III. International Agricultural, Biological & Life Science Conference, Edirne, Turkey, 1 - 03 September 2021, pp.330
- III. **RESEARCHES ON FODMAP REDUCTION IN BREAD**
BAYDEMİR E., ÖZÜLKÜ G.
INTERNATIONAL AEGEAN SYMPOSIUMS On Innovation Technologies & Engineering, Turkey, 12 March 2021
- IV. **INCORPORATION OF OAT FLOUR SOURDOUGH ON BISCUIT FORMULATION TO REDUCE THE FAT CONTENT OF BISCUIT**
ÖZÜLKÜ G.
2nd INTERNATIONAL EUROPEAN CONFERENCE ON INTERDISCIPLINARY SCIENTIFIC RESEARCHES, 4 - 05 July 2020, vol.2
- V. **RHEOLOGICAL BEHAVIOUR OF TYPE I SOURDOUGH DURING REFRESHMENT PROCEDURE**
ÖZÜLKÜ G.
1st International Conference on Food Technology and Nutrition, 15 - 17 May 2019, vol.2, pp.8-14
- VI. **THE EFFECT OF WHOLEMEAL SOURDOUGH ON THE QUALITY OF SHORT DOUGH BISCUITS**
Özülkü G., Alioğlu T.
INTERNATIONAL SYMPOSIUM FOR ENVIRONMENTAL SCIENCE AND ENGINEERING RESEARCH, Konya, Turkey, 25 - 27 May 2019, pp.182
- VII. **Evaluation of stability of Type I and Type II sourdough with chickpea flour during frozen storage**
ÖZÜLKÜ G., ARICI M.
7. uluslararası ekşi hamur sempozyumu -Sourdough for health, 6 - 08 June 2018
- VIII. **Usage invertase enzyme in fondant production: the effect of concentration on quality parametres**
Özcan Ö., Metin Yıldırım R., TOKER Ö. S., Akbaş N., ÖZÜLKÜ G., YAMAN M.
The 4th international symposium on "traditional foods from adriatic to caucasus", Girne, Cyprus (Kkct), 19 - 21 April 2018
- IX. **Usage of Invertase Enzyme in Fondant Production: The Effect of Concentration on Quality Parameters**
METİN YILDIRIM R., TOKER Ö. S., Akbaş N., ÖZÜLKÜ G., Yaman M.
The 4th International Symposium on "Traditional Foods from Adriatic to Caucasus", Kyrenia, Cyprus (Kkct), 19

April 2018, pp.383

- X. **Replacement of Sugar and Wheat Flour with Grape Marc in Cake Formulation: Effect on Textural Properties**
METİN YILDIRIM R., Işık G., Bursa K., TOKER Ö. S., Palabıyık İ., ÖZÜLKÜ G.
The 4th International Symposium on "Traditional Foods from Adriatic to Caucasus", Kyrenia, Cyprus (Kktc), 19 April 2018, pp.242
- XI. **Ekşi Ekmek Hamurundan İzole Edilen Mayaların Teknolojik Özellikleri**
YILMAZ D., ARICI M., METİN YILDIRIM R., ÖZÜLKÜ G.
19.ULUSLARARASI KATILIMLI ULUSAL BİYOTEKNOLOJİ KONGRESİ, Turkey, 1 - 03 December 2017
- XII. **PHYTASE ACTIVE OF LACTIC ACID BACTERIA FROM TURKISH SOURDOUGH**
METİN YILDIRIM R., ARICI M., ÖZÜLKÜ G., DURAK M. Z.
International Congress on Fundamental and Applied Sciences, Saraybosna, Bosnia And Herzegovina, 21 August 2017, pp.69
- XIII. **Detection of starch in yoghurt using ATR-FTIR spectroscopy**
US A. A., METİN YILDIRIM R., ÖZÜLKÜ G., BAYRAKTAR F. Ş., SAĞDIÇ O.
2nd International Balkan Agriculture Congress, 16 - 18 May 2017
- XIV. **Detection of Adulteration of Orange Juice Adulterated with Grapefruit, Mandarin, Apple and Grape Juices using ATR-FTIR Spectroscopy**
ÖZÜLKÜ G., METİN YILDIRIM R., TOKER Ö. S., Cebi N., DURAK M. Z., ARICI M.
II. International Turkic World Conference on Chemical Sciences and Technologies, Üsküp, Macedonia, 26 October 2016, pp.164
- XV. **Gölevez (Colocasia esculenta L. Schott) Ununun Ekmek Üretiminde Kullanılması**
Arıcı M., Yaşar B., Özülkü G., Metin Yıldırım R., Toker Ö. S.
TÜRKİYE 12. GIDA KONGRESİ, Edirne, Turkey, 5 - 07 October 2016, pp.252
- XVI. **Physical and sensory characteristics of cake enriched with honeybee pollen**
ÖZÜLKÜ G., METİN YILDIRIM R., SAĞDIÇ O., ARICI M.
15th International Cereal and Bread Congress, İstanbul, Turkey, 18 April 2016, pp.161
- XVII. **Improving the Bread Quality of High Protease Activity Flour Using Hops Humulus Lupulus Extract**
ÖZÜLKÜ G., SİVRİ ÖZAY D.
Institute of Food Technologists Annual Meeting 2016, 16 - 19 July 2016
- XVIII. **Resistant Starch Content of Taro (Colocasia esculenta L. Schott) Flour Drying at Different Conditions**
ARICI M., METİN YILDIRIM R., ÖZÜLKÜ G., TOKER Ö. S., Yasar B.
IFT Annual Meeting, Chicago, United States Of America, 16 July 2016
- XIX. **Improvement Functionality of Bread With Olive Pulp Powder**
ARICI M., Cakir E., ÖZÜLKÜ G., TOKER Ö. S., METİN YILDIRIM R.
IFT Annual Meeting, Chicago, United States Of America, 16 July 2016
- XX. **Improving the bread quality of high protease activity flour by using hops (Humulus Lupulus)**
ÖZÜLKÜ G., SİVRİ ÖZAY D.
International Food Technologist (IFT), Chicago, United States Of America, 16 July 2016, pp.15
- XXI. **Physical and Sensory Characteristics of Cake Enriched with Honeybee Pollen**
ÖZÜLKÜ G., METİN YILDIRIM R., SAĞDIÇ O., ARICI M.
15th International Cerael and Bread Congress, 18 - 21 April 2016
- XXII. **Bread making performance of yeast isolated from Turkish sourdough**
ÖZÜLKÜ G., METİN YILDIRIM R., Yılmaz D., ARICI M., DURAK M. Z., SAĞDIÇ O.
6th Sourdough Symposium, Nantes, France, 30 September 2015, pp.30
- XXIII. **Identification of Yeast Isolated from Turkish Sourdough**
DURAK M. Z., METİN YILDIRIM R., ÖZÜLKÜ G., ARICI M., SAĞDIÇ O.
Vith Sourdough Symposium, Nantes, France, 30 September 2015, pp.72
- XXIV. **Determination of yeast diversity in Turkish sourdough by FT-IR spectroscopy**
METİN YILDIRIM R., ÖZÜLKÜ G., DURAK M. Z., ARICI M., SAĞDIÇ O.
Vith Sourdough Symposium, Nantes, France, 30 September 2015, pp.71

XXV. Identification of Lactic Acid Bacteria Isolated form Turkish Industrial Sourdough Samples

Cakir E., Durak M. Z., Metin Yıldırım R., Özülkü G., Arıcı M., Sağdıç O.

6.Sourdough Symposium, Nantes, France, 30 September - 02 October 2015, pp.73

XXVI. Improving the bread quality of high protease activity flour by using sourdough and liquid rye dough

ÖZÜLKÜ G., SİVRİ ÖZAY D.

V Symposium on Sourdough, Helsinki, Finland, 10 October 2012, pp.16

Supported Projects

Özülkü G., Şık E., TUBITAK Project, Buğday Kepeğinin Mikrobiyal Biyoproses ile Modifikasyonu ve Modifiye Kepeğin Ekmek Üretiminde Kullanılması, 2022 - 2023

ARICI M., SAĞDIÇ O., ÖZÜLKÜ G., TULUKÇU E., Erkölencik M. F., Project Supported by Higher Education Institutions, Olgunlaşmamış Siyez Buğdayının Fizikokimyasal Besinsel ve Prebiyotik Özelliklerinin Belirlenmesi, 2019 - 2021

Arıcı M., Dağhoğlu O., Bilgin Şimşek E., TUBITAK Project, Fonksiyonel Bir Bileşen Olarak Gölevez Colocasia esculenta L Schott Unununun Fırıncılık Ürünlerinde Kullanımı, 2014 - 2016

Scientific Refereeing

JOURNAL OF FOOD PROCESSING AND PRESERVATION, SCI Journal, November 2020

Turkish Journal of Agriculture - Food Science and Technology (TURJAF), Other Indexed Journal, November 2020

JOURNAL OF FOOD PROCESSING AND PRESERVATION, SCI Journal, July 2020

Metrics

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H-Index (Scopus): 8

Scholarships

Tubitak 2219 Yurt Dışı Doktora Sonrası Araştırma Programı, TUBITAK, 2020 - 2022