

Assoc. Prof. SÜLEYMAN POLAT

Personal Information

Office Phone: [+90 322 338 6173](tel:+903223386173) Extension: 108

Fax Phone: [+90 322 338 6614](tel:+903223386614)

Email: polats@cu.edu.tr

Web: <https://avesis.cu.edu.tr//polats>

International Researcher IDs

ScholarID: poUVjZ0AAAAJ

ORCID: 0000-0002-2112-3136

Publons / Web Of Science ResearcherID: G-7485-2018

ScopusID: 54783344900

Yoksis Researcher ID: 159280

Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, Turkey 2011 - 2016

Postgraduate, Akdeniz University, Institute Of Science, Gıda Mühendisliği, Turkey 2009 - 2011

Dissertations

Doctorate, Nanokompozit Ambalaj Filmi Üretimi ve Bazı Gıdaların Ambalajlanmasında Kullanım Olanaklarının Belirlenmesi, Cukurova University, Fen Bilimleri, Gıda Mühendisliği, 2016

Postgraduate, Gıda ambalajlanması ve servisinde kullanılabilecek nisasta bazlı köpük tabak üretimi, Akdeniz University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, 2011

Research Areas

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

Academic Titles / Tasks

Associate Professor, Cukurova University, Mühendislik Fakültesi, Gıda Mühendisliği, 2024 - Continues

Assistant Professor, Cukurova University, Mühendislik Fakültesi, Gıda Mühendisliği, 2020 - 2024

Jury Memberships

Post Graduate, Post Graduate, Akdeniz Üniversitesi, August, 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of diaphragma juglandis fructus extract fortified edible coating on the storage stability of walnut kernels**
POLAT S.
BIOMASS CONVERSION AND BIOREFINERY, vol.15, no.3, pp.3641-3652, 2025 (SCI-Expanded)
- II. **The evaluation of black carrot, green cabbage, grape, and apple juices as substrates for the production of functional water kefir-like beverages.**
AĞIRMAN B., Yıldız I., POLAT S., ERTEN H.
Food science & nutrition, vol.12, no.9, pp.6595-6611, 2024 (SCI-Expanded)
- III. **Characterization of hutbak based papers activated with limonene for food packaging**
Pan H. C., Polat S.
INDUSTRIAL CROPS AND PRODUCTS, vol.204, pp.1-8, 2023 (SCI-Expanded)
- IV. **Elucidation of the impact of four different drying methods on the phenolics, volatiles, and color properties of the peels of four types of citrus fruits**
GÜÇLÜ G., POLAT S., Kelebek H., Çapanoğlu Güven E., SELLİ S.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.102, no.13, pp.6036-6046, 2022 (SCI-Expanded)
- V. **Investigation of synergistic antibacterial effect of organic acids and ultrasound against pathogen biofilms on lettuce**
Turhan E. U., POLAT S., ERGİNKAYA Z., KONURAY G.
FOOD BIOSCIENCE, vol.47, 2022 (SCI-Expanded)
- VI. **Color quality, ascorbic acid, total carotenoid, and volatile compounds of dried orange slices as influenced by packaging methods and storage conditions**
POLAT S.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.46, no.6, 2022 (SCI-Expanded)
- VII. **Comparative elucidation of colour, volatile and phenolic profiles of black carrot (*Daucus carota L.*) pomace and powders prepared by five different drying methods**
POLAT S., GÜÇLÜ G., Kelebek H., KESKİN M., SELLİ S.
FOOD CHEMISTRY, vol.369, 2022 (SCI-Expanded)
- VIII. **Non-thermal plasma effects on the lipoxygenase enzyme activity, aroma and phenolic profiles of olive oil**
AMANPOUR A., VANDAMME J., POLAT S., Kelebek H., VAN DURME J., SELLİ S.
INNOVATIVE FOOD SCIENCE & EMERGING TECHNOLOGIES, vol.54, pp.123-131, 2019 (SCI-Expanded)
- IX. **Effects of metal nanoparticles on the physical and migration properties of low density polyethylene films**
POLAT S., FENERCİOĞLU H., GUCLU M.
JOURNAL OF FOOD ENGINEERING, vol.229, pp.32-42, 2018 (SCI-Expanded)
- X. **Effects of nanoparticle ratio on structural, migration properties of polypropylene films and preservation quality of lemon juice**
Polat S., FENERCİOĞLU H., Turhan E. U., GUCLU M.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.42, no.4, 2018 (SCI-Expanded)
- XI. **Effects of Starch Sources and Supplementary Materials on Starch Based Foam Trays**
AYGÜN A., USLU M. K., POLAT S.
JOURNAL OF POLYMERS AND THE ENVIRONMENT, vol.25, no.4, pp.1163-1174, 2017 (SCI-Expanded)
- XII. **Design of probiotic dry fermented sausage (sucuk) production with microencapsulated and free cells of *Lactobacillus rhamnosus***
Turhan E. U., ERGİNKAYA Z., POLAT S., Ozer E. A.
TURKISH JOURNAL OF VETERINARY & ANIMAL SCIENCES, vol.41, no.5, pp.598-603, 2017 (SCI-Expanded)
- XIII. **The effects of the addition of corn husk fibre, kaolin and beeswax on cross-linked corn starch foam**
POLAT S., Uslu M., AYGÜN A., CERTEL M.
JOURNAL OF FOOD ENGINEERING, vol.116, no.2, pp.267-276, 2013 (SCI-Expanded)
- XIV. **Effects of glyoxal cross-linking on baked starch foam**
Uslu M., Polat S.

Articles Published in Other Journals

- I. **The removal of foodborne pathogen biofilms with the treatment of ultrasound and/or organic acid**
ÜNAL TURHAN E., POLAT S.
Karadeniz Fen Bilimleri Dergisi, vol.12, 2022 (Peer-Reviewed Journal)
- II. **Comparison of Some Chemical, Textural and Sensorial Properties of Commercial Hazelnut-Cacao Spreads**
POLAT S.
GIDA, vol.46, no.1, pp.190-200, 2021 (Peer-Reviewed Journal)
- III. **KONVEKSİYONEL VE DONDURARAK KURUTMA YÖNTEMLERİNİN KARPUZUN BAZI KALİTE ÖZELLİKLERİNE ETKİSİ**
AKYILDIZ A., POLAT S., AĞÇAM E.
GIDA / THE JOURNAL OF FOOD, vol.42, no.2, pp.169-176, 2017 (Peer-Reviewed Journal)
- IV. **Inactivation Kinetics of Pectin Methyl Esterase under Thermosonicationand Thermal Pasteurisation Process Conditions in Orange Juice**
AĞÇAM E., POLAT S., AKYILDIZ A., FENERCİOĞLU H.
Akademik Gıda, vol.14, no.12, pp.85-91, 2016 (Peer-Reviewed Journal)
- V. **Gıda ambalajlamasında nanoteknoloji uygulamaları: inorganik nanopartiküllerin kullanımı**
POLAT S., FENERCİOĞLU H.
Gıda, vol.39, no.3, pp.184-194, 2014 (Peer-Reviewed Journal)
- VI. **Limon Ekşisi Üretimi Üzerine Bir Araştırma**
UÇAN TÜRKMEN F., AKYILDIZ A., AĞÇAM E., POLAT S.
GIDA, vol.39, no.5, pp.283-290, 2014 (Peer-Reviewed Journal)
- VII. **Gıda Ambalajlamasında Nanoteknoloji Uygulamaları İnorganik Nanopartiküllerin Kullanımı**
POLAT S., FENERCİOĞLU H.
GIDA/THE JOURNAL OF FOOD, vol.39, no.3, pp.187-194, 2014 (Peer-Reviewed Journal)

Books

- I. **Nanoparticles in Food Packaging: Opportunities and Challenges**
POLAT S., AĞÇAM E., DÜNDAR B., AKYILDIZ A.
in: Health and Safety Aspects of Food Processing Technologies, Malik Abdül, Erginkaya Zerrin, Erten Hüseyin, Editor, Springer, Cham, pp.571-611, 2019
- II. **Recent Studies on Healthy Nutrients Changing in Fruit Juices Processed with Non-thermal Technologies**
AĞÇAM E., DÜNDAR B., POLAT S., AKYILDIZ A.
in: Health and Safety Aspects of Food Processing Technologies, Malik Abdül, Erginkaya Zerrin, Erten Hüseyin, Editor, Springer International Publishing, Cham, pp.235-271, 2019
- III. **Food Applications of Carboxymethyl Cellulose**
POLAT S., USLU M. K., Küçüközet A. O.
in: Carboxymethyl Cellulose Volume II Pharmaceutical and Industrial Applications, Ibrahim H. Mondal, Editor, Nova Science Publishers, New York, pp.73-92, 2019
- IV. **Potato and Potato-Processing Technology**
AKYILDIZ A., POLAT S., AĞÇAM E., FENERCİOĞLU H.
in: Handbook of Vegetable Preservation and Processing, Hui, Y.H., Öğül Evranuz E., Editor, CRC Press, Florida, pp.590-621, 2015

Papers Published in Refereed Scientific Meetings

- I. Effects of added sugar content and fermentation on some properties of fermented sucuk
BENLİ H., POLAT S.
3. International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 19 - 20 March 2020,
pp.512
- II. Determination of the Antimicrobial and Antioxidant Effects of Sodom Apple (*Calotropis procera*)
Used in the Production of West African Cheese (WAGASHI)
ERGINKAYA Z., Mamoudou Anza A., KONURAY G., POLAT S.
1st International / 11th NationalFood Engineering Congress, 7 - 09 November 2019
- III. Recent concern in fresh and fresh-cut produce: The formation of *L. monocytogenes* based biofilm
ÜNAL TURHAN E., ERGINKAYA Z., POLAT S.
International Conference on Research of Agricultural and Food Technologies (I-CRAFT 2019), Adana, Turkey, 3 -
05 October 2019, pp.18-19
- IV. Effect of storage on textural properties of different strawberry cultivars
AĞÇAM E., SARIDAŞ M. A., DÜNDAR B., POLAT S., AKYILDIZ A., PAYDAŞ KARGI S.
Recent Applications In Modified Atmosphere Packaging Of Fruit And Vegetables, 23 - 25 October 2018
- V. The Risk of Biofilm Formation from Pathogenic Bacteria and Control Methods in fresh leafy
vegetable
ÜNAL TURHAN E., ERGINKAYA Z., POLAT S.
3rd International Mediterranean Science and Engineering Congress (IMSEC 2018), 24 - 26 October 2018
- VI. The Effect of Thermosonication on Some Quality Parameters of Watermelon Juice
AĞÇAM E., DÜNDAR B., POLAT S., AKYILDIZ A.
XIIIth International Conference of Food Physicists, 23 - 25 October 2018
- VII. Effect of storage on textural properties of different strawberry cultivars
AĞÇAM E., SARIDAŞ M. A., DÜNDAR B., POLAT S., PAYDAŞ S.
XIIIth International Conference of Food Physicists, Antalya, Turkey, 23 October - 25 November 2018, pp.141
- VIII. Applications of metallic nanoparticles to fruits and vegetables in postharvest treatment
POLAT S.
4th International Agriculture Congress, 5 - 08 July 2018
- IX. Taze Yapraklı Sebzelerde Patojen Biyofilm Oluşum Riski ve Kontrol Yöntemleri
ÜNAL TURHAN E., ERGINKAYA Z., POLAT S.
International Mediterranean Science and Engineering Congress (IMSEC 2018), Adana, Turkey, 24 - 26 April 2018,
pp.636-640
- X. Recent Applications In Modified Atmosphere Packaging Of Fruit And Vegetables
POLAT S., AĞÇAM E., DÜNDAR B., AKYILDIZ A.
International Conference on RAW MATERIALS TO PROCESSED FOODS, Antalya, Turkey, 11 - 13 April 2018, pp.257
- XI. Production of Colored Lemonade and Effect of Heat Pasteurization on Quality Parameteres
AĞÇAM E., AKYILDIZ A., POLAT S., İNAN N.
2nd Congress on Food Structure & Design, 26 - 28 October 2016
- XII. Production of Colored Lemonade and Effect of Heat Pasteurization on Quality Parameters
AĞÇAM E., AKYILDIZ A., POLAT S., İNAN N.
Second Congress of Food Structure and Design, Antalya, Turkey, 26 - 28 October 2016
- XIII. Çinko oksit içeren Polipropilen Esaslı Filmlerin Işık Geçirgenliği ve Mor Ötesi Işınları Absorbansı
POLAT S., FENERCİOĞLU H.
Türkiye 12. gıda Kongresi, Turkey, 5 - 07 October 2016
- XIV. Süper Meyve Kuş Kirazı *Aronia melanocarpa*
İNAN N., AĞÇAM E., POLAT S., AKYILDIZ A.
Türkiye 12. gıda Kongresi, Edirne, Turkey, 5 - 07 October 2016
- XV. Turpun *Raphanus Stativus L* Biyoaktif Bileşenler Açısından Değerlendirilmesi
İNAN N., AĞÇAM E., POLAT S., AKYILDIZ A.

- Her Yönüyle Osmaniye, Osmaniye, Turkey, 3 - 06 May 2016
- XVI. **Turpun Raphanus sativus L Biyoaktif Bileşenler Açısından Değerlendirilmesi**
İNAN N., AĞÇAM E., POLAT S., GÜN M., DÜNDAR B., AKYILDIZ A.
Stratejik Kalkınmada Kent Değerleri Sempozyumu, Osmaniye, Turkey, 3 - 05 May 2016
- XVII. **Effects of Emulsifiers and Lipolytic Enzymes on Pan Bread Properties**
ÖZER M. S., POLAT S.
15 th International Cereal and Bread Congress, 18 - 21 April 2016
- XVIII. **Effect of Conventional Drying and Microwave Drying Operations on Quality Parameters of Plum Pestil**
GÜLER A., POLAT S., FENERCİOĞLU H.
The 3rd International Symposium on Traditional Foods from Adriatic to Caucasus, 1 - 04 October 2015, pp.55
- XIX. **Determination of fruit tea properties brewed in bags of various shapes and materials**
POLAT S., FENERCİOĞLU H., AKYILDIZ A.
Innovations in food packaging shelf life and food safety, Munich, Germany, 15 - 17 September 2015
- XX. **Effects of Zinc Oxide Nanoparticles on the Physical and Migration Properties of LDPE Films**
POLAT S., FENERCİOĞLU H., GÜCLÜ M.
Innovations in Food Packaging, Shelf Life and Food Safety, 15 - 17 September 2015
- XXI. **The Effects of Microencapsulated L rhamnosus on Textural Properties of Sucuk**
ÜNAL TURHAN E., ERGINKAYA Z., POLAT S.
2nd International Symposium on Fermented Meat, VALENSİYA, Spain, 20 - 23 October 2014, pp.120
- XXII. **Inactivation kinetics of pectin methylesterase under thermosonication and thermal process conditions in orange juice**
AĞÇAM E., POLAT S., AKYILDIZ A., FENERCİOĞLU H.
NAFI 2014 International Food Congress, Aydin, Turkey, 26 - 29 May 2014, pp.332
- XXIII. **Effects Of Starch Type On some Properties Of Baked Foam Trays**
AYGÜN A., USLU M. K., POLAT S.
International Food Congress Novel Approaches in Food Industry NAFI 2014, Aydin, Turkey, 26 May 2014 - 29 May 2015
- XXIV. **The Effects Of Various Supplementary Materials On the Properties of Starch Based Foam Plates**
AYGÜN A., USLU M. K., POLAT S.
International Food Congress Novel Approaches in Food Industry NAFI 2014, Aydin, Turkey, 26 - 29 May 2014
- XXV. **Inactivation Kinetics of Pectin Methylesterease Under Thermosonication and Thermal Pasteurization Process Conditions in Orange Juice**
AĞÇAM E., POLAT S., AKYILDIZ A., FENERCİOĞLU H.
International Food Congress Novel Approaches in Food Industry NAFI 2014, Aydin, Turkey, 26 - 29 May 2014
- XXVI. **Turunç Ekşisi Üzerine Bir Araştırma**
AKÇALIOĞLU O., AĞÇAM E., POLAT S., UÇAN TÜRKMEN F., AKYILDIZ A.
4. Geleneksel Gıdalar Sempozyumu, Adana, Turkey, 17 - 19 April 2014
- XXVII. **Limonata**
AĞÇAM E., POLAT S., DURSUN G., GÖVCE G., MERGEN G., AKYILDIZ A.
LİMONATA, Turkey, 17 - 19 April 2014, pp.823-827
- XXVIII. **Karaçılı Biber Salçası Üretimi Üzerine Bir Araştırma**
POLAT S., AĞÇAM E., YÜCEL T., AKYILDIZ A.
4. Geleneksel Gıdalar Sempozyumu", "4. Geleneksel Gıdalar Sempozyumu, Turkey, 17 - 19 April 2014
- XXIX. **Turunç Ekşisi Üretimi Üzerine Bir Araştırma**
AKÇALIOĞLU O., AĞÇAM E., POLAT S., UÇAN TÜRKMEN F., ASLAN S., AKYILDIZ A.
4. GELENEKSEL GİDALAR SEMPOZYUMU, Adana, Turkey, 17 - 19 April 2014, pp.814-818
- XXX. **Kağıt helvanın bazı özellikleri üzerine bir araştırma**
POLAT S., AĞÇAM E., AKYILDIZ A., FENERCİOĞLU H.
III. Geleneksel Gıdalar Sempozyumu, Konya, Turkey, 10 - 12 May 2012, pp.207-209
- XXXI. **Kağıt Helvanın Bazı Özellikleri Üzerine Araştırma**

- POLAT S., AĞÇAM E., AKYILDIZ A., FENERCİOĞLU H.
III. GELENEKSEL GIDALAR SEMPOZYUMU, Konya, Turkey, 10 - 12 May 2012, pp.207-209
- XXXII. Dolmalık Patlıcan Kurusu Üretimi Üzerine Bir Araştırma**
POLAT S., AĞÇAM E., UÇAN TÜRKMEN F., AKYILDIZ A., FENERCİOĞLU H.
III. GELENEKSEL GIDALAR SEMPOZYUMU, Konya, Turkey, 10 - 12 May 2012, pp.194-196
- XXXIII. Properties of baked foams obtained from native and cross linked corn starches**
USLU M. K., POLAT S., AYGÜN A.
Novel Approach in Food Industry 2011, Turkey, 26 - 29 May 2011
- XXXIV. Viscosities And Morphological Properties Of The Modified Corn Starches**
AYGÜN A., USLU M. K., POLAT S.
International Food Congress Novel Approaches in Food Industry, Turkey, 26 - 29 May 2011
- XXXV. Effects of corn fiber clay and beeswax on the some properties of corn starch based foam trays**
USLU M. K., POLAT S., AYGÜN A.
Novel Approach in Food Industry 2011, Turkey, 26 - 29 May 2011
- XXXVI. Application of whey protein based edible coatings to extend the shelf life of fresh cut Rocha pear**
SUSANNA ALDES F., POLAT S.
Actas del IX Simposio Nacional y VI Ibérico sobre Maduración Postcosecha, 1 - 03 May 2008

Supported Projects

CABAROĞLU T., DARICI M., ERTEN H., POLAT S., Özönur A., Project Supported by Higher Education Institutions, Çukurova Üniversitesi Alkollü İçkiler Analiz Özel gıda Kontrol Laboratuvarı Alt Yapısının Geliştirilmesi, 2021 - 2023

POLAT S., Project Supported by Higher Education Institutions, Ceviz İç Zarı Ekstraktı ile Güçlendirilmiş Yenilebilir Kaplamalın İç Cevizin Kalite Özellikleri Üzerine Etkisi, 2020 - 2023

POLAT S., Pan H. Ç., Project Supported by Higher Education Institutions, Enkapsüle DLimonen İçerikli Aktif Kağıt Üretimi, 2021 - 2022

ERTEN H., DARICI M., POLAT S., Project Supported by Higher Education Institutions, ÇUKUROVA ÜNİVERSİTESİ GIDA MÜHENDİSLİĞİ BÖLÜMÜ MÜDEK EĞİTİM AKREDİTASYONU VE ALKOLLÜ İÇKİLER ANALİZ ÖZEL GIDA LABORATUVARI AKREDİTASYON DENETİMİ ALTYAPI PROJESİ, 2019 - 2021

BENLİ H., POLAT S., Project Supported by Higher Education Institutions, Çukurova Üniversitesi pilot sucuk işletmesi koşullarında üretilen geleneksel Türk sucuklarının kalitesi üzerine formülasyonun ve üretim tekniklerinin etkisi, 2018 - 2021

ERTEN H., AĞIRMAN B., CABAROĞLU T., DARICI M., POLAT S., Project Supported by Higher Education Institutions, Çukurova Üniversitesi Gıda Mühendisliği Bölümü Alkollü İçkiler Analiz Özel gıda Kontrol Laboratuvarı Alt Yapısının Geliştirilmesi, 2018 - 2021

AĞÇAM E., DÜNDAR B., AKYILDIZ A., PAYDAŞ S., SARIDAŞ M. A., POLAT S., Project Supported by Higher Education Institutions, Bazı Çilek Çeşitlerinde Aktif Hasat Süresince Hasatta ve Raf Ömrü Sırasında Meyve Kalite Parametreleri ile Enzim İlişkileri, 2018 - 2020

POLAT S., Project Supported by Higher Education Institutions, Production of Colored Lemonade and Effect of Heat Pasteurization on Quality Parameters, 2016 - 2017

BENLİ H., AKYILDIZ A., AĞÇAM E., POLAT S., Project Supported by Higher Education Institutions, Gıda Bilimi ve Teknolojisinde Son Gelişmeler Çalıştayı, 2015 - 2016

POLAT S., TUBITAK Project, Nanokompozit Ambalaj Filmi Üretimi Ve Muzun Raf Ömrü Üzerine Etkisinin Araştırılması, 2014 - 2015

Metrics

Publication: 61
Citation (WoS): 170

Citation (Scopus): 194

H-Index (WoS): 7

H-Index (Scopus): 8

Non Academic Experience

Avşar Simit ve Unlu Mamuller, Üretim Mühendisi

Unifree Gümrüksüz Mağazacılık, Satış Temsilcisi

Urart, Satış Temsilcisi

Universidade Católica Portuguesa, Erasmus Değişim Programı Öğrencisi