

## 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

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 kullanılacak 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

Assistant Professor, Cukurova University, Ziraat Fakültesi, Gıda Mühendisliği, 2020 - Continues

Research Assistant, Cukurova University, Ziraat Fakültesi, Gıda Mühendisliği, 2011 - 2020

### Jury Memberships

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

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

1. 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)

- II. **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)
- III. **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)
- IV. **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)
- V. **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)
- VI. **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)
- VII. **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)
- VIII. **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)
- IX. **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)
- X. **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)
- XI. **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)
- XII. **Effects of glyoxal cross-linking on baked starch foam**  
Uslu M., Polat S.  
CARBOHYDRATE POLYMERS, vol.87, no.3, pp.1994-1999, 2012 (SCI-Expanded)

## 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 Thermosonication and 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 & Book Chapters**

### **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., Ögöl Evranuz E., Editor, CRC Press, Florida, pp.590-621, 2015

## **Refereed Congress / Symposium Publications in Proceedings**

### **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)**

ERGİNKAYA Z., Mamoudou Anza A., KONURAY G., POLAT S.

1st International / 11th National Food 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., ERGİNKAYA 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., ERGİNKAYA 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., ERGİNKAYA 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 İçeren 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., GÜÇLÜ 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., ERGİNKAYA 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, Aydın, 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, Aydın, 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, Aydın, 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, Aydın, 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. **Karaisalı 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 GIDALAR 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., Özonur 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 Kaplamanın 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: 59  
Citation (WoS): 170  
Citation (Scopus): 194  
H-Index (WoS): 7  
H-Index (Scopus): 8

## Non Academic Experience

Avşar Simit ve Unlu Mamuller

Unifree Gmrksz Mađazacılık  
Urat  
Universidade Catlica Portuguesa