

## **Assoc. Prof. AYÇA AYDOĞDU**

### **Personal Information**

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### **International Researcher IDs**

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### **Education Information**

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2014 - 2019

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Turkey 2011 - 2014

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, Turkey 2006 - 2011

### **Dissertations**

Doctorate, DEVELOPMENT OF NANOFIBER BASED ACTIVE PACKAGING MATERIAL BY ELECTROSPINNING TECHNIQUE AND FOOD VALIDATION, Middle East Technical University, Graduate School Of Natural And Applied Sciences, 2019

Postgraduate, Microwave-Infrared Combination Drying of Eggplants, Middle East Technical University, Graduate School Of Natural And Applied Sciences, 2014

### **Research Areas**

Food Engineering

### **Academic Titles / Tasks**

Associate Professor, Canakkale Onsekiz Mart University, Çanakkale Uygulamalı Bilimler Fakültesi, Gıda Teknolojisi, 2023 - Continues

Assistant Professor, Canakkale Onsekiz Mart University, Çanakkale Uygulamalı Bilimler Fakültesi, 2020 - 2023

Research Assistant, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, 2012 - 2018

### **Academic and Administrative Experience**

Manager of Research and Application Center, Canakkale Onsekiz Mart University, Çanakkale Uygulamalı Bilimler Fakültesi, Gıda Teknolojisi, 2023 - Continues

Assistant Manager of Research and Application Center, Canakkale Onsekiz Mart University, Çanakkale Uygulamalı Bilimler Fakültesi, Gıda Teknolojisi, 2020 - 2023

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

- I. **Expanding the shelf life of chicken fillets by the use of polylactic acid (PLA) active films: An investigation of orange oil antibacterial potential**  
YILDIZ E., Aydogdu Emir A.  
Polymer Engineering and Science, 2024 (SCI-Expanded)
- II. **Development of simultaneous antioxidant and visual pH-sensing films based on guar gum loaded with Aronia melanocarpa extract**  
Aydogdu Emir A., YILDIZ E., ÖZ E., Amarowicz R., Proestos C., Khan M. R., Elobeid T., ÖZ F.  
International Journal of Food Science and Technology, vol.58, no.8, pp.4376-4385, 2023 (SCI-Expanded)
- III. **Stereolithography (SLA) 3D printing of ascorbic acid loaded hydrogels: A controlled release study**  
Karakurt I., Aydogdu A., Cikrikci S., Orozco J., Lin L.  
INTERNATIONAL JOURNAL OF PHARMACEUTICS, vol.584, 2020 (SCI-Expanded)
- IV. **Characterization of curcumin incorporated guar gum/orange oil antimicrobial emulsion films**  
Aydogdu A., Radke C. J., Bezci S., Kirtil E.  
INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, vol.148, pp.110-120, 2020 (SCI-Expanded)
- V. **Enhancing oxidative stability of walnuts by using gallic acid loaded lentil flour based electrospun nanofibers as active packaging material**  
Aydogdu A., YILDIZ E., AYDOĞDU Y., ŞÜMNÜ S. G., ŞAHİN S., Ayhan Z.  
FOOD HYDROCOLLOIDS, vol.95, pp.245-255, 2019 (SCI-Expanded)
- VI. **Zero-field nuclear magnetic resonance of chemically exchanging systems**  
Barskiy D. A., Taylen M. C. D., Marco-Rius I., Kurhanewicz J., Vigneron D. B., Cikrikci S., Aydogdu A., Reh M., Pravdivtsev A. N., Hoevener J., et al.  
NATURE COMMUNICATIONS, vol.10, 2019 (SCI-Expanded)
- VII. **Nanostructured poly(lactic acid)/soy protein/HPMC films by electrospinning for potential applications in food industry**  
Aydogdu A., YILDIZ E., Ayhan Z., AYDOĞDU Y., ŞÜMNÜ S. G., ŞAHİN S.  
EUROPEAN POLYMER JOURNAL, vol.112, pp.477-486, 2019 (SCI-Expanded)
- VIII. **Fabrication of gallic acid loaded Hydroxypropyl methylcellulose nanofibers by electrospinning technique as active packaging material**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
CARBOHYDRATE POLYMERS, vol.208, pp.241-250, 2019 (SCI-Expanded)
- IX. **Utilization of lentil flour as a biopolymer source for the development of edible films**  
Aydogdu A., KIRTIL E., ŞÜMNÜ S. G., ÖZTOP H. M., AYDOĞDU Y.  
JOURNAL OF APPLIED POLYMER SCIENCE, vol.135, no.23, 2018 (SCI-Expanded)
- X. **Development of novel pea flour-based nanofibres by electrospinning method**  
OĞUZ S., Tam N., Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.53, no.5, pp.1269-1277, 2018 (SCI-Expanded)
- XI. **Effects of addition of different fibers on rheological characteristics of cake batter and quality of cakes**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.55, no.2, pp.667-677, 2018 (SCI-Expanded)
- XII. **A novel electrospun hydroxypropyl methylcellulose/polyethylene oxide blend nanofibers: Morphology and physicochemical properties**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
CARBOHYDRATE POLYMERS, vol.181, pp.234-246, 2018 (SCI-Expanded)
- XIII. **Influence of solution properties and pH on the fabrication of electrospun lentil flour/HPMC blend nanofibers**  
Tam N., OĞUZ S., Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
FOOD RESEARCH INTERNATIONAL, vol.102, pp.616-624, 2017 (SCI-Expanded)

- XIV. **Visualisation of cakes differing in oil content with magnetic resonance imaging**  
KIRTIL E., Tonyali B., Aydogdu A., Bulut E. Y., Tatar B. C., ÖZTOP H. M.  
INTERNATIONAL JOURNAL OF FOOD PROPERTIES, vol.20, 2017 (SCI-Expanded)
- XV. **Effects of Microwave-Infrared Combination Drying on Quality of Eggplants**  
Aydogdu A., ŞÜMNÜ S. G., ŞAHİN S.  
FOOD AND BIOPROCESS TECHNOLOGY, vol.8, no.6, pp.1198-1210, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Development of Oleuropein Incorporated Chitosan Films for Antioxidant Active Food Packaging Applications**  
Aydogdu Emir A., kaya f.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.12, no.1, pp.158-165, 2023 (Peer-Reviewed Journal)
- II. **Assessment of Elenolic Acid Incorporation on Physical Properties of Chitosan Films to be Used as Active Packaging Material**  
AYDOĞDU EMİR A., Uçkun O.  
Turkish Journal of Science & Technology, vol.18, no.1, pp.87-95, 2023 (Peer-Reviewed Journal)
- III. **Antioxidant Properties of SLA Printed Hydrogels Enriched with Pomegranate Powder**  
AYDOĞDU EMİR A., ÇIKRIKCI ERÜNSAL S.  
The European Journal of Research and Development, vol.2, no.2, pp.45-52, 2022 (Peer-Reviewed Journal)
- IV. **Gallic acid encapsulated pea flour based nanofibers produced by electrospinning as a potential active food packaging material**  
AYDOĞDU EMİR A., YILDIZ E., AYDOĞDU Y., ŞÜMNÜ S. G., ŞAHİN S.  
LEGUME SCIENCE, vol.3, no.2, pp.1-10, 2021 (Scopus)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Assessment of Rosemary Oil Incorporation On Poly Lactic Acid (PLA) Films For Food Packaging Application**  
AYDOĞDU EMİR A.  
The 16th International Scientific Research Congress - Science and Engineering, Ankara, Turkey, 11 March 2023
- II. **Characterization of Sumac Seed Oil Incorporated Polylactic acid (PLA) Films For Potential Food Packaging Applications**  
AYDOĞDU EMİR A.  
4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), Ankara, Turkey, 14 December 2022
- III. **Guar Gum and Sumac Based Active Food Packaging: Effect of Sumac Form and Solvent Type**  
AYDOĞDU EMİR A., IŞIK E.  
VI. International Anatolian Agriculture, Food, Environment and Biology Congress, Kütahya, Turkey, 07 October 2022
- IV. **Zero-Field NMR of Quadrupolar Nuclei and Exchanging Systems**  
BARSKIY D. A., REH M., ÇIKRIKCI S., AYDOĞDU A., BLANCHARD J., BUDKER D., PINES A.  
HYP18- An International Conference on Nuclear Hyperpolarization, 2 - 05 September 2018
- V. **Mercimek Unu ve HPMC Konsantrasyonunun Elektroeğirme Çözeltileri ve Nanolif Özelliklerine Olan Etkileri**  
Tam N., OĞUZ S., AYDOĞDU EMİR A., ŞÜMNÜ S. G., ŞAHİN S.  
10. Gıda Mühendisliği Kongresi, 09 November 2017
- VI. **Effects of legume flours on batter rheology and cake physical quality**  
AYDOĞDU A., Özkahraman C., ŞÜMNÜ S. G., ŞAHİN S.

- III. International Conference on Agricultural and Food Engineering, Malaysia, 23 - 25 August 2016
- VII. **Investigation of physical properties and moisture sorption behaviour of different marshmallow formulations**  
KIRTIL E., AYDOĞDU A., ÖZTOP H. M.  
III. International Conference of Agricultural and Food Engineering, 23 - 25 August 2016
- VIII. **Limon Lifinin Kek Hamuru ve Kekin Kalite Parametrelerine Olan Etkisinin İncelenmesi**  
AYDOĞDU EMİR A., ŞÜMNÜ S. G., ŞAHİN S.  
Türkiye 12. Gıda Kongresi, Edirne, Turkey, 05 October 2016
- IX. **The Effect of Microwave Infrared Combination Drying on Quality of Osmotically Dehydrated Eggplants**  
AYDOĞDU A., SERVET GÜLÜM Ş., ŞAHİN S.  
4th International Conference and Exhibition on Food Processing and Technology, 10 - 12 August 2015
- X. **Mikrodalga kızıl ötesi kombinasyonu ile kurutmanın ön işlem görmüş patlıcanların kuruma davranışı üzerindeki etkileri**  
AYDOĞDU A., ŞÜMNÜ S. G., ŞAHİN S.  
Pamukkale Üniversitesi Gıda Sempozyumu III, Denizli, Turkey, 13 - 15 May 2015
- XI. **The Effects of Microwave-Infrared Combination Drying Characteristics of Eggplants**  
AYDOĞDU EMİR A., ŞÜMNÜ S. G., ŞAHİN S.  
The 2nd International Symposium on Traditional Foods from Adriatic to Caucasus, Macedonia, 24 October 2013
- XII. **Infrared Assisted Microwave Drying of Eggplants**  
AYDOĞDU EMİR A., ŞÜMNÜ S. G., ŞAHİN S.  
4th International Conference on Food Engineering and Biotechnology (ICFEB 2013), Kopenhagen, Denmark, 19 May 2013

## Activities in Scientific Journals

Journal of advanced research in natural and applied sciences (Online), Assistant Editor/Section Editor, 2020 - Continues

## Metrics

Publication: 31

Citation (WoS): 158

Citation (Scopus): 666

H-Index (WoS): 7

H-Index (Scopus): 12