

Res. Asst. EDA YILDIZ

Personal Information

Office Phone: [+90 312 210](tel:+90312210) Extension: 5638

Email: edaberk@metu.edu.tr

Web: <https://avesis.metu.edu.tr/edaberk>

International Researcher IDs

ScholarID: VAW3JXYAAAAJ

ORCID: 0000-0002-1018-9930

Publons / Web Of Science ResearcherID: AAZ-8940-2020

ScopusID: 57203536652

Yoksis Researcher ID: 226696

Education Information

Doctorate, Middle East Technical University, Graduate School of Natural and Applied Sciences, Gıda Mühendisliği (Dr), Turkey 2016 - Continues

Research Areas

Engineering and Technology

Academic Titles / Tasks

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 2015 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Reduction of lipid oxidation in olive oil using gelatin-based centrifugally spun fibers loaded with caffeic acid**
Guler G. S., YILDIZ E., Yazicioglu N., ŞÜMNÜ S. G., ŞAHİN S.
Food Bioscience, vol.59, 2024 (SCI-Expanded)
- II. **Peppermint oil-infused polylactic acid films: A novel approach for antimicrobial and biodegradable food packaging**
Emir A. A., YILDIZ E., Kirtil E.
Polymer Engineering and Science, vol.64, no.6, pp.2943-2955, 2024 (SCI-Expanded)
- III. **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, vol.64, no.6, pp.2569-2578, 2024 (SCI-Expanded)
- IV. **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)

- V. **Active Films Based on Faba Bean (*Vicia faba* L.) Flour Incorporated with Sumac (*Rhus coriaria*): Assessment of Antioxidant and Antimicrobial Performances of Packaging for Shelf Life of Chicken Breast**
Emir A. A., YILDIZ E., AYDOĞDU Y., ŞÜMNÜ S. G.
FOOD AND BIOPROCESS TECHNOLOGY, vol.16, no.2, pp.327-341, 2023 (SCI-Expanded)
- VI. **Citric acid cross-linked curcumin/chitosan/chickpea flour film: An active packaging for chicken breast storage**
Yildiz E., Emir A. A., Sumnu G., Kahyaoglu L. N.
FOOD BIOSCIENCE, vol.50, 2022 (SCI-Expanded)
- VII. **Assessment of curcumin incorporated chickpea flour/PEO (polyethylene oxide) based electrospun nanofiber as an antioxidant and antimicrobial food package**
YILDIZ E., ŞÜMNÜ S. G., KAHYAOĞLU L. N.
FOOD AND BIOPRODUCTS PROCESSING, vol.135, pp.205-216, 2022 (SCI-Expanded)
- VIII. **Monitoring freshness of chicken breast by using natural halochromic curcumin loaded chitosan/PEO nanofibers as an intelligent package**
YILDIZ E., ŞÜMNÜ S. G., KAHYAOĞLU L. N.
International Journal of Biological Macromolecules, vol.170, pp.437-446, 2021 (SCI-Expanded)
- IX. **Development of pea flour based active films produced through different homogenization methods and their effects on lipid oxidation**
YILDIZ E., Bayram İ., Sumnu G., ŞAHİN S., Ibis O. I.
FOOD HYDROCOLLOIDS, 2021 (SCI-Expanded)
- X. **Microwave Pretreatment for the Improvement of Physicochemical Properties of Carob Flour and Rice Starch-Based Electrospun Nanofilms**
Uygun E., YILDIZ E., Sumnu G., ŞAHİN S.
FOOD AND BIOPROCESS TECHNOLOGY, vol.13, no.5, pp.838-850, 2020 (SCI-Expanded)
- XI. **Enhancing oxidative stability of walnuts by using gallic acid loaded lentil flour based electrospun nanofibers as active packaging material**
Aydogdu A., Yıldız E., Aydogdu Y., Sumnu G., Şahin S., Ayhan Z.
Food Hydrocolloids, vol.95, pp.245-255, 2019 (SCI-Expanded)
- XII. **Effects of Microwave-Assisted Baking on Quality of Gluten-free Cakes and Breads**
YILDIZ E., Sumnu G., ŞAHİN S.
CEREAL FOODS WORLD, vol.64, no.4, 2019 (SCI-Expanded)
- XIII. **Nanostructured poly(lactic acid)/soy protein/HPMC films by electrospinning for potential applications in food industry**
Aydogdu A., Yıldız E., Ayhan Z., Aydoğdu Y., Şümnü S. G., Şahin S.
EUROPEAN POLYMER JOURNAL, vol.112, pp.477-486, 2019 (SCI-Expanded)
- XIV. **Monitoring the Effects of Ingredients and Baking Methods on Quality of Gluten-Free Cakes by Time-Domain (TD) NMR Relaxometry**
Yıldız E., Güner S., Sumnu G., Şahin S., Oztop M. H.
FOOD AND BIOPROCESS TECHNOLOGY, vol.11, pp.1923-1933, 2018 (SCI-Expanded)
- XV. **Effects of buckwheat flour, gums and proteins on rheological properties of gluten-free batters and structure of cakes**
YILDIZ E., ŞÜMNÜ S. G., ŞAHİN S.
QUALITY ASSURANCE AND SAFETY OF CROPS & FOODS, vol.10, no.3, pp.245-254, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **The effects of crosslinking agents on faba bean flour–chitosan–curcumin films and their characterization**

YILDIZ E., İLHAN E., KAHYAOĞLU L. N., ŞÜMNÜ S. G., ÖZTOP H. M.

Legume Science, vol.4, no.1, 2022 (ESCI)

II. Gallic acid encapsulated pea flour-based nanofibers produced by electrospinning as a potential active food packaging material

Aydogdu Emir A., YILDIZ E., AYDOĞDU Y., ŞÜMNÜ S. G., ŞAHİN S.

Legume Science, vol.3, no.2, 2021 (Scopus)

Books & Book Chapters

I. Utilization of Lentils in Different Food Products

Yıldız E., Şümnü S. G., Aydoğdu A.

in: Lentils: Production, Processing Technologies, Products, and Nutritional Profile, Jasim Ahmed, Muhammad Siddiq, Mark A. Uebersax, Editor, John Wiley & Sons, West Sussex, UK , New Jersey, pp.237-259, 2023

Refereed Congress / Symposium Publications in Proceedings

I. Gallic acid incorporated pea flour films as an edible and active food packaging

Yıldız E., Bayram İ., Şümnü S. G., Şahin S.

15TH INTERNATIONAL HYDROCOLLOIDS CONFERENCE-FOOD2020, Melbourne, Australia, 2 - 05 March 2020

II. A MACROSCOPIC APPROACH TO DEFINE CHARACTERISTICS OF GLUTEN-FREE CAKES BY T2 RELAXATION TIMES

Yıldız E., Güner S., Şümnü S. G., Şahin S., Öztop H. M.

ISEKI-2018, Stuttgart, Germany, 3 - 05 July 2018, pp.1

III. Usage of carob bean flour in gluten free cakes

BERK E., ŞÜMNÜ S. G., ŞAHİN S.

EFF2017 Engineering Future Food, 28 May - 31 December 2017, pp.1909-1914

IV. Ultrasonikasyon Yöntemi ile Hazırlanmış Zencefil Mikrokapsüllerinin Karakterizasyonu

BERK E., PERK C., ÖZTOP H. M.

9. Gıda Mühendisliği Kongresi, Turkey, 12 - 14 November 2015

Supported Projects

ŞAHİN S., ŞÜMNÜ S. G., BERK E., Project Supported by Higher Education Institutions, KIZIL ÖTESİ-MİKRODALGA FIRINDA PİŞİRİLMEME UYGUN KEÇİBOYNUZU UNU İÇEREN KEK FORMÜLASYONLARININ TASARLANMASI, 2017 - 2017

Metrics

Publication: 22

Citation (WoS): 274

Citation (Scopus): 376

H-Index (WoS): 8

H-Index (Scopus): 9