Assoc. Prof. AYÇA AYDOĞDU

Personal Information

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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. **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)

II. **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)

III. **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)

IV. **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)

V. **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)

VI. **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)

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. **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)

IX. **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)

X. **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)

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. **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)

XIII. **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)

XIV. **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 Çözeltisi 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), Kopenhag, 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: 30
Citation (WoS): 158
Citation (Scopus): 666
H-Index (WoS): 7
H-Index (Scopus): 12