

Prof. ALEV BAYINDIRLI

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAZ-6076-2020

ScopusID: 6601954584

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Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, Turkey 1985 - 1989

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, Turkey 1982 - 1985

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Chemical Engineering, Turkey 1978 - 1982

Dissertations

Doctorate, Kinetics of aspergillus oryzae cultivation on starch, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 1989

Postgraduate, Isolation and purification of red beet root pigment by ultrafiltration, Middle East Technical University, Faculty of Engineering, 1985

Research Areas

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

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 2003 - Continues

Academic and Administrative Experience

Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 2009 - 2016

Courses

ENZYME ENGINEERING, Postgraduate, 2017 - 2018
INTRODUCTION TO PROCESS PRINCIPLES, Undergraduate, 2018 - 2019
APPLIED KINETICS, Undergraduate, 2018 - 2019, 2017 - 2018
MATERIAL AND ENERGY BALANCES, Undergraduate, 2018 - 2019

Advising Theses

Bayındırlı A., Enzyme-assisted extraction of antioxidants from banana peel, Postgraduate, S.KATIRCI(Student), 2023
BAYINDIRLI A., Comparison of different antioxidant assays for estimation of antioxidant potential of selected fruit juice waste materials, Postgraduate, B.EGE(Student), 2022
BAYINDIRLI A., Determination of phenolic compound profiles and antioxidant effect of black elderberry, echinacea and iceland moss extracts on late-release soft lozenge, Postgraduate, Ö.YILDIZ(Student), 2021
MERT B., BAYINDIRLI A., Effect of different freezing rates on the texture and quality parameters of selected fruit and vegetable, Postgraduate, M.BULUT(Student), 2015
BAYINDIRLI A., Inactivation mechanism of polyphenol oxidase during ultrasound treatment, Doctorate, H.BALTACIOĞLU(Student), 2014
BAYINDIRLI A., MERT B., Production of micro and nano fibers from hazelnut skin and utilization in biscuits, Postgraduate, E.YILDIZ(Student), 2014
ALPAS H., BAYINDIRLI A., Inactivation of foodborne pathogens and enzymes by ultrasound under pressure at non-lethal and lethal temperatures in apple and orange juices, Doctorate, B.HÜLYA(Student), 2013
YILDIZ F., BAYINDIRLI A., Effects of edible chitosan coating on quality parameters of pomegranate (punica granatum) arils, Postgraduate, A.Can(Student), 2012
BAYINDIRLI A., MERT B., Application of high dynamic microfluidization to improve some quality parameters and stability of orange juice, Postgraduate, Ö.YÜCE(Student), 2011
BAYINDIRLI A., Effect of ultrasound on drying rate of selected produce, Doctorate, Y.KANTAŞ(Student), 2007
Yener M. E., Bayındırlı A., Pressurized Liquid Extraction of Phenolic Compounds from Fruit Pomaces, Doctorate, İ.Hasbay(Student), 2006
BAYINDIRLI A., ALPAS H., Evaluation of high pressure pretreatment for enhancing the drying rate of selected fruits and vegetables, Postgraduate, U.YÜCEL(Student), 2006
BAYINDIRLI A., ALPAS H., Effect of high hydrostatic pressure (HHP) on some quality parameters and shelf-life of fruit and vegetable, Postgraduate, S.DEDE(Student), 2005
BAYINDIRLI A., ALPAS H., Inactivation of proxidase and lipoxygenase in green beans, peas and carrots by a combination of high hydrostatic pressure and mild heat treatment, Postgraduate, Ç.AKYOL(Student), 2004
BAYINDIRLI A., Effect of controlled atmosphere storage, modified atmosphere packaging and gaseous ozone treatment on the survival characteristics of salmonella enteritidis at cherry tomatoes, Postgraduate, E.DAŞ(Student), 2004
BAYINDIRLI A., Inactivation of peroxidase and lipoxygenase in green beans, peas and carrots by a combination of high hydrostatic pressure and mild heat treatment, Postgraduate, Ç.Akyol(Student), 2004
BAYINDIRLI A., Effect of hydrogen peroxide high hydrostatic pressure on Salmonella enteritidis in liquid whole egg, Postgraduate, G.İŞIKER(Student), 2002
BAYINDIRLI A., Effects of size and number of perforations on water vapor permeability of polyethylene film., Postgraduate, H.ÖZLEM(Student), 2002
BAYINDIRLI A., Solute effects and optimization of water activity for the growth of thermophilic fungi, Postgraduate, F.ATİK(Student), 2000
BAYINDIRLI A., Enzymatic peeling of stone fruits, Postgraduate, İ.Toker(Student), 2000
BAYINDIRLI A., The Effect of component interactions on the structural and functional properties of legume extrudates, Doctorate, H.DOĞAN(Student), 2000
BAYINDIRLI A., Control of enzymatic browning in apple juice from Amasya variety, Postgraduate, N.Fatma(Student), 2000

BAYINDIRLI A., Control of enzymatic browning in apple tuxe from Amasya variety, Postgraduate, N.FATMA(Student), 2000

BAYINDIRLI A., Manufacturing a new protective polyethylene based film containing zeolites for packaging of foods, Doctorate, S.NUR(Student), 2000

BAYINDIRLI A., Use of a new polymer based film for modified atmosphere packaging of fruits and vegetables, Postgraduate, T.Türkeri(Student), 1999

BAYINDIRLI A., Use of a new polymer based film for modified atmosphere packaging of fruit and vegetables, Postgraduate, T.TÜRKERİ(Student), 1999

BAYINDIRLI A., Control of enzymatic browning in apple juice with antibrowning agents and analysis by using response surface methodology, Postgraduate, H.ÖZOĞLU(Student), 1996

HAMAMCI H., BAYINDIRLI A., Effects of growth conditions and stress applications on the cell composition of bakers' yeast, Doctorate, N.Ertugay(Student), 1995

BAYINDIRLI A., HAMAMCI H., Effects of growth conditions and stress application on the cell composition of bakers yeast, Doctorate, N.ERTUGAY(Student), 1995

BAYINDIRLI A., Peroxidase and lipoxygenase inactivation and ascorbic acid retention during blanching of peas greenbeans and carrots, Postgraduate, B.GÜNEŞ(Student), 1992

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effect of freezing rate and storage on the texture and quality parameters of strawberry and green bean frozen in home type freezer**
Bulut M., Bayer Ö., Kirtil E., Bayındırlı A.
INTERNATIONAL JOURNAL OF REFRIGERATION-REVUE INTERNATIONALE DU FROID, vol.88, pp.360-369, 2018 (SCI-Expanded)
- II. **Secondary structure and conformational change of mushroom polyphenol oxidase during thermosonication treatment by using FTIR spectroscopy**
Baltacıoğlu H., Bayındırlı A., Severcan F.
FOOD CHEMISTRY, vol.214, pp.507-514, 2017 (SCI-Expanded)
- III. **Effect of thermal treatment on secondary structure and conformational change of mushroom polyphenol oxidase (PPO) as food quality related enzyme: A FTIR study**
Baltacıoğlu H., Bayındırlı A., Severcan M., Severcan F.
FOOD CHEMISTRY, vol.187, pp.263-269, 2015 (SCI-Expanded)
- IV. **Inactivation of *Listeria monocytogenes* and *Escherichia coli* by Ultrasonic Waves Under Pressure at Nonlethal (Manosonication) and Lethal Temperatures (Manothermosonication) in Acidic Fruit Juices**
GUZEL B. H., ARROYO C., CONDON S., PAGAN R., BAYINDIRLI A., ALPAS H.
FOOD AND BIOPROCESS TECHNOLOGY, vol.7, no.6, pp.1701-1712, 2014 (SCI-Expanded)
- V. **Preface**
BAYINDIRLI A.
Enzymes in Fruit and Vegetable Processing: Chemistry and Engineering Applications, 2010 (SCI-Expanded)
- VI. **Evaluation of high pressure pretreatment for enhancing the drying rates of carrot, apple, and green bean**
YÜCEL U., ALPAS H., BAYINDIRLI A.
JOURNAL OF FOOD ENGINEERING, vol.98, no.2, pp.266-272, 2010 (SCI-Expanded)
- VII. **Enzymes in Fruit and Vegetable Processing Chemistry and Engineering Applications Preface**
Bayındırlı A.
ENZYMES IN FRUIT AND VEGETABLE PROCESSING: CHEMISTRY AND ENGINEERING APPLICATIONS, 2010 (SCI-Expanded)
- VIII. **Preface**
BAYINDIRLI A.
Enzymes in Fruit and Vegetable Processing: Chemistry and Engineering Applications, 2010 (SCI-Expanded)

- IX. **Introduction to enzymes**
Bayindirli A.
ENZYMES IN FRUIT AND VEGETABLE PROCESSING: CHEMISTRY AND ENGINEERING APPLICATIONS, pp.1-18, 2010 (SCI-Expanded)
- X. **EFFECT OF HIGH PRESSURE ON LACTOCOCCAL BACTERIOPHAGES**
Avsaroglu M. D., Bozoglu F., Akcelik M., BAYINDIRLI A.
JOURNAL OF FOOD SAFETY, vol.29, no.1, pp.26-36, 2009 (SCI-Expanded)
- XI. **Extraction of total phenolics of sour cherry pomace by high pressure solvent and subcritical fluid and determination of the antioxidant activities of the extracts**
ADİL I. H., YENER M. E., BAYINDIRLI A.
SEPARATION SCIENCE AND TECHNOLOGY, vol.43, no.5, pp.1091-1110, 2008 (SCI-Expanded)
- XII. **Subcritical (carbon dioxide plus ethanol) extraction of polyphenols from apple and peach pomaces, and determination of the antioxidant activities of the extracts**
Adil I. H., Cetin H. I., Yener M. E., Bayindirli A.
JOURNAL OF SUPERCRITICAL FLUIDS, vol.43, no.1, pp.55-63, 2007 (SCI-Expanded)
- XIII. **High hydrostatic pressure treatment and storage of carrot and tomato juices: Antioxidant activity and microbial safety**
DEDE S., Alpas H., Bayindirli A.
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.87, no.5, pp.773-782, 2007 (SCI-Expanded)
- XIV. **Bubble and pore formation of the high-ratio cake formulation with polydextrose as a sugar- and fat-replacer**
KOÇER D., HİCŞAŞMAZ Z., BAYINDIRLI A., KATNAŞ S.
JOURNAL OF FOOD ENGINEERING, vol.78, no.3, pp.953-964, 2007 (SCI-Expanded)
- XV. **Inactivation of peroxidase and lipoxygenase in carrots, green beans, and green peas by combination of high hydrostatic pressure and mild heat treatment**
AKYOL C., Alpas H., Bayindirli A.
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.224, no.2, pp.171-176, 2006 (SCI-Expanded)
- XVI. **Effect of controlled atmosphere storage modified atmosphere packaging and gaseous ozone treatment on the survival of Salmonella Enteritidis on cherry tomatoes**
DAS E., GÜZİN CANDAN G. C., BAYINDIRLI A.
Food Microbiology, vol.23, pp.430-438, 2006 (SCI-Expanded)
- XVII. **Efficiency of high pressure treatment on inactivation of pathogenic microorganisms and enzymes in apple, orange, apricot and sour cherry juices**
Bayindirli A., Alpas H., Bozoglu F., HİZAL M.
FOOD CONTROL, vol.17, no.1, pp.52-58, 2006 (SCI-Expanded)
- XVIII. **Lye peeling of 'Tombul' hazelnuts and effect of peeling on quality**
KALEOĞLU M., BAYINDIRLI L. A., Bayindirli A.
FOOD AND BIOPRODUCTS PROCESSING, vol.82, pp.201-206, 2004 (SCI-Expanded)
- XIX. **Modification of water vapour transfer rate of low density polyethylene films for food packaging**
Dirim S. N., Özden Ö., Bayındırlı A., Esin A.
JOURNAL OF FOOD ENGINEERING, vol.63, no.1, pp.9-13, 2004 (SCI-Expanded)
- XX. **Effect of L cysteine kojic acid and 4 hexylresorcinol combination on inhibition of enzymatic browning in Amasya apple juice**
İYİDOĞAN N., BAYINDIRLI A.
Journal Of Food Engineering, vol.62, pp.299-304, 2004 (SCI-Expanded)
- XXI. **Combined effect of high hydrostatic pressure treatment and hydrogen peroxide on Salmonella Enteritidis in liquid whole egg**
Isiker G., Gurakan G. C., Bayindirli A.
EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.217, no.3, pp.244-248, 2003 (SCI-Expanded)
- XXII. **Enzymatic peeling of apricots nectarines and peaches**
TOKER İ., BAYINDIRLI A.

- Lwt-Food Science And Technology, vol.36, pp.215-221, 2003 (SCI-Expanded)
- XXIII. **Inhibition of enzymic browning in cloudy apple juice with selected antibrowning agents**
Ozoglu H., Bayindirli A.
FOOD CONTROL, vol.13, pp.213-221, 2002 (SCI-Expanded)
- XXIV. **Inhibition of enzymatic browning in cloudy apple juice with selected antibrowning agents**
BAYINDIRLI A., ÖZOĞLU H.
Food Control, vol.13, pp.213-221, 2002 (SCI-Expanded)
- XXV. **Inactivation and injury of Escherichia coli O157 : H7 and Staphylococcus aureus by pulsed electric fields**
DAMAR S., Bozoglu F., Hizal M., Bayindirli A.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.18, no.1, pp.1-6, 2002 (SCI-Expanded)
- XXVI. **Stability of a recombinant plasmid carrying alpha-amylase gene in Bacillus subtilis**
Gurakan G. C., Bayindirli A., Ogel Z., Tanboga P.
WORLD JOURNAL OF MICROBIOLOGY & BIOTECHNOLOGY, vol.14, no.2, pp.293-295, 1998 (SCI-Expanded)
- XXVII. **Fed-batch cultivation of bakers' yeast: Effect of nutrient depletion and heat stress on cell composition**
Ertugay N., Hamamci H., Bayindirli A.
FOLIA MICROBIOLOGICA, vol.42, no.3, pp.214-218, 1997 (SCI-Expanded)
- XXVIII. **NONENZYMATIC BROWNING IN CLARIFIED APPLE JUICE AT HIGH-TEMPERATURES - A RESPONSE-SURFACE ANALYSIS**
BAYINDIRLI A., KHALAFI S., YENICERI A.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.19, no.3, pp.223-227, 1995 (SCI-Expanded)
- XXIX. **PEROXIDASE AND LIPOXYGENASE INACTIVATION DURING BLANCHING OF GREEN BEANS GREEN PEAS AND CARROTS**
GÜNEŞ B., BAYINDIRLI A.
Lwt-Food Science And Technology, vol.26, pp.406-410, 1993 (SCI-Expanded)
- XXX. **Kinetic analysis of aspergillus oryzae cultivations on starch**
BAYINDIRLI A., OZILGEN M., UNGAN S.
Biocatalysis and Biotransformation, vol.5, no.1, pp.71-78, 1991 (SCI-Expanded)
- XXXI. **MODELING OF SEQUENTIAL BATCH ULTRAFILTRATION OF RED BEET EXTRACT**
BAYINDIRLI A., YILDIZ F., OZILGEN M.
JOURNAL OF FOOD SCIENCE, vol.53, no.5, pp.1418-1422, 1988 (SCI-Expanded)

Articles Published in Other Journals

- I. **A new protective polyethylene based film containing zeolites for the packaging of fruits and vegetables: Film preparation**
Dirim S. N., Esin A., BAYINDIRLI A.
Turkish Journal of Engineering and Environmental Sciences, vol.27, no.1, pp.1-9, 2003 (Scopus)

Books & Book Chapters

- I. **Enzymes in Fruit and Vegetable Processing: Chemistry and Engineering Applications**
Bayındırh A. (Editor)
CRC, New York , New-York, 2010

Supported Projects

BAYINDIRLI A., ÇOLAK M., Project Supported by Higher Education Institutions, Muz Kabuğundan Biyoaktif Bileşiklerin Yüksek Basınç ve Ultrason Destekli Ekstraksiyonu, 2020 - 2023

BAYINDIRLI A., GÜLENC B. E., Project Supported by Higher Education Institutions, Seçilmiş Meyve Suyu Atıklarının Antioksidan Potansiyelinin Belirlenmesi için Farklı Antioksidan Analizlerinin Karşılaştırılması, 2021 - 2022

BAYINDIRLI A., KARADEMİR Y., Project Supported by Higher Education Institutions, FARKLI FORMÜLASTON VE METOTLAR KULLANILARAK GELİŞTİRİLEN LİPOZOM SİSTEMLERİNİN KARAKTERİZASYONU, 2018 - 2019

BAYINDIRLI A., ÖZTOP H. M., Deniz H., Bulut M., ÖKMEN Z. A., Project Supported by Higher Education Institutions, SEÇİLMİŞ MEYVE VE SEBZE ÖRNEKLERİNDE DONDURUCU DONDURMA HIZININ VE FARKLI SICAKLIKLARDA MUHAFAZANIN ÜRÜN KALİTESİNE ETKİSİ, 2014 - 2015

BAYINDIRLI A., SÖYLER U. B., ÖKMEN Z. A., Project Supported by Higher Education Institutions, Çay üretim alanlarından toplanan örneklerde fenolik asit profilinin elde edilmesi, 2013 - 2013

Bayındırlı A., Baltacıoğlu H., TUBITAK Project, Polifenol Oksidaz Enziminin Isı-Ultrason Kombinasyonu ile İnaktivasyonu Sırasında Enzimin Yapısında Meydana Gelen Değişimin Fourier Değişim Kızıl Ötesi (FTIR) Spektroskopisi ile İncelenmesi, 2012 - 2013

Yener M. E., Bayındırlı A., Project Supported by Higher Education Institutions, Biyoaktif Maddelerin Yüksek Basınç Sıvı Ekstraksiyonu ile Elde Edilmesi, 2003 - 2004

Metrics

Publication: 33
Citation (WoS): 1410
Citation (Scopus): 1599
H-Index (WoS): 17
H-Index (Scopus): 18

Non Academic Experience

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