

Prof. SERVET GÜLÜM ŞÜMNÜ

Personal Information

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Education Information

Doctorate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Gıda Mühendisliği (Dr), Turkey 1994 - 1997

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Gıda Mühendisliği (YI) (Tezli), Turkey 1991 - 1994

Undergraduate, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, Turkey 1987 - 1991

Foreign Languages

English, C1 Advanced

Research Areas

Food Engineering, Food Technology, Cereals Technology, Food Processing (pasteurisation, sterilisation, refrigeration, lyophilisation, etc.), Food Packaging, Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, 2008 - Continues
Associate Professor, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, 2002 - 2008

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, 2000 - 2002

Lecturer PhD, Middle East Technical University, Faculty Of Engineering, Department Of Food Engineering, 1997 - 2000

Academic and Administrative Experience

Middle East Technical University, Faculty of Engineering, Department of Food Engineering, 2005 - 2007

Courses

MICROWAVE PROCESSING OF FOODS, Postgraduate, 2018 - 2019, 2019 - 2020

Food Quality Control, Undergraduate, 2018 - 2019

Advising Theses

- Öztop H. M. , ŞÜMNÜ S. G. , IMPROVEMENT OF PEA PROTEINS' PROPERTIES BY MICROWAVE GLYCATION, Postgraduate, Ü.ERTUĞRUL(Student), 2020
- Şümnü S. G. , Şahin S., Effects of microwave heating on electrospinning of carob bean flour based nanofibers, Postgraduate, E.UYGUN(Student), 2019
- Şümnü S. G. , Şahin S., Development of nanofiber based active packaging material by electrospinning technique and food validation, Doctorate, A.AYDOĞDU(Student), 2019
- Şümnü S. G. , Öztop H. M. , Microwave glycation of soy protein isolate, Postgraduate, S.NAMLI(Student), 2019
- Şümnü S. G. , Öztop H. M. , Physicochemical and structural characterization of microfluidized and sonicated legume starches, Postgraduate, A.BİTİK(Student), 2019
- ŞAHİN S., ŞÜMNÜ S. G. , Production and characterization of chickpea flour based biofilms containing gallic acid, Postgraduate, S.KOCAKULAK(Student), 2019
- Şümnü S. G. , Öztop H. M. , Utilization of phenolic compounds extracted from different agricultural wastes through various encapsulation methods, Doctorate, B.ÇİLEK(Student), 2018
- ŞAHİN S., ŞÜMNÜ S. G. , Characterization of pea flour based nanofibers produced by electrospinning method, Postgraduate, S.OĞUZ(Student), 2018
- ŞAHİN S., ŞÜMNÜ S. G. , Evaluation of the effects of legume flour incorporation into wafer sheets, Postgraduate, B.TUFAN(Student), 2018
- Şümnü S. G. , Şahin S., Production of lentil flour and hydroxypropyl methylcellulose based nanofiber by using electrospinning method, Postgraduate, N.TAM(Student), 2018
- ŞAHİN S., ŞÜMNÜ S. G. , Evaluation of different coating materials for encapsulation of phenolic compounds extracted from onion (*Allium cepa*) skin, Postgraduate, B.AKDENİZ(Student), 2017
- ŞAHİN S., ŞÜMNÜ S. G. , Investigation of sensory and instrumental methods to predict shelf-life of jelly gums, Doctorate, S.TİREKİ(Student), 2017
- ŞAHİN S., ŞÜMNÜ S. G. , Modeling of heat and mass transfer in microwave-infrared heating of zucchini, Doctorate, N.YAZICIOĞLU(Student), 2016
- ŞAHİN S., ŞÜMNÜ S. G. , Effects of different flour, gum and protein types on quality of gluten-free cakes, Postgraduate, E.BERK(Student), 2016
- ŞAHİN S., ŞÜMNÜ S. G. , Encapsulation of vitamin b1 using double emulsion method, Doctorate, Ö.YÜCE(Student), 2016
- ŞAHİN S., ŞÜMNÜ S. G. , Stability of double emulsions for food applications, Postgraduate, M.YILDIRIM(Student), 2015
- ŞAHİN S., ŞÜMNÜ S. G. , Assesment of pore development, oil and moisture distribution in frying, Postgraduate, B.İŞİK(Student), 2015
- ŞAHİN S., ŞÜMNÜ S. G. , Encapsulation of rosemary essential oil, Postgraduate, H.TURASAN(Student), 2014
- ŞAHİN S., ŞÜMNÜ S. G. , Development of functional cakes to be baked in microwave-infrared combination oven, Postgraduate, B.CANAN(Student), 2014
- ŞÜMNÜ S. G. , ŞAHİN S., Effect of different flours on quality of gluten-free wafer sheets, Postgraduate, S.MERT(Student), 2014
- ŞAHİN S., ŞÜMNÜ S. G. , Effect of different flours on quality of gluten-free wafer sheet, Postgraduate, S.Mert(Student), 2014
- ŞAHİN S., ŞÜMNÜ S. G. , Microwave-infrared combination drying of eggplants, Postgraduate, A.AYDOĞDU(Student), 2014
- ŞAHİN S., ŞÜMNÜ S. G. , Development of gluten-free bread formulations for baking in infrared-microwave combination oven, Doctorate, İ.DEMİRKESEN(Student), 2013
- ŞAHİN S., ŞÜMNÜ S. G. , Encapsulation of wheat germ oil, Postgraduate, B.YAZICIOĞLU(Student), 2013
- ŞAHİN S., ŞÜMNÜ S. G. , Effect of nanoencapsulation of purified polyphenolic powder on encapsulation efficiency, storage and baking stability, Postgraduate, A.LUCA(Student), 2012
- ŞAHİN S., ŞÜMNÜ S. G. , Microwave extraction of phenolic compounds from caper and oleaster, Postgraduate, E.DURMAZ(Student), 2012
- ŞAHİN S., ŞÜMNÜ S. G. , Microencapsulation of phenolic compounds extracted from sour cherry (*Prunus cerasus* L.) pomace, Postgraduate, B.ÇİLEK(Student), 2012
- ŞAHİN S., ŞÜMNÜ S. G. , Usage of microwave and ultrasound in the extraction of essential oils and phenolic compounds,

Postgraduate, A.EMİNE(Student), 2011

ŞAHİN S., ŞÜMNÜ S. G. , Usage of solar-spouted bed drier in the drying of parboiled wheat, corn and pea, Postgraduate, F.TUNABOYU(Student), 2011

ŞAHİN S., ŞÜMNÜ S. G. , Design of gluten free rice cake formulations for baking in infrared-microwave combination oven, Doctorate, E.TURABI(Student), 2010

ŞAHİN S., ŞÜMNÜ S. G. , Microwave assisted extraction of phenolic compounds from tomato and sour cherry pomaces, Postgraduate, M.ŞİMŞEK(Student), 2010

ŞAHİN S., ŞÜMNÜ S. G. , Effects of different batter formulations on physical and chemical properties of microwave and conventionally fried chicken fingers, Doctorate, I.BARUTÇU(Student), 2009

ŞAHİN S., ŞÜMNÜ S. G. , Effects of xanthan and guar gums on quality and staling of gluten free cakes baked in microwave-infrared combination oven, Postgraduate, H.FİLİZ(Student), 2009

ŞAHİN S., ŞÜMNÜ S. G. , Optimization of roasting conditions of hazelnuts in microwave assisted ovens, Postgraduate, N.UYSAL(Student), 2009

ŞAHİN S., ŞÜMNÜ S. G. , Modeling of tempering of frozen potato puree by microwave, infrared assisted microwave and ohmic heating methods, Doctorate, N.SEYHUN(Student), 2008

ŞAHİN S., ŞÜMNÜ S. G. , Investigation of quality and staling of breads with different gum formulations baked in different ovens, Doctorate, S.ÖZGE(Student), 2008

ŞAHİN S., ŞÜMNÜ S. G. , Investigation of physical properties of different cake formulations during baking with microwave and infrared-microwave combination, Doctorate, Ö.ŞAKIYAN(Student), 2007

ŞÜMNÜ S. G. , Infrared-assisted microwave drying in the production of bread crumbs, Postgraduate, S.TİREKİ(Student), 2005

ŞÜMNÜ S. G. , ŞAHİN S., Optimization of microwave frying of potato slices, Postgraduate, M.HALİL(Student), 2005

ŞAHİN S., ŞÜMNÜ S. G. , Effects of different batter formulations on quality of deep-fat fried carrot slices, Postgraduate, N.AKDENİZ(Student), 2004

ŞAHİN S., ŞÜMNÜ S. G. , Optimization of processing conditions during halogen lamp-microwave combination baking of cakes, Postgraduate, K.MELİKE(Student), 2004

ŞAHİN S., ŞÜMNÜ S. G. , Effects of different batter formulations on quality of deep-fat fried chicken nuggets, Postgraduate, S.FİRDEVŞ(Student), 2004

ŞAHİN S., ŞÜMNÜ S. G. , Recovery of strawberry aroma compounds by pervaporation, Postgraduate, A.İŞÇİ(Student), 2004

ŞAHİN S., ŞÜMNÜ S. G. , Optimization of microwave-halogen lamp baking of bread, Postgraduate, P.DEMİREKLER(Student), 2004

ŞÜMNÜ S. G. , Optimization of Processing Conditions During Halogen Lamp-Microwave Baking of Cakes, Postgraduate, K.Melike(Student), 2004

ŞAHİN S., ŞÜMNÜ S. G. , Effects of different ovens and enzymes on quality parameters of bread, Postgraduate, S.ÖZGE(Student), 2003

ŞÜMNÜ S. G. , Comparison of microwave drying and microwave mixed-bed drying of red papers, Postgraduate, Ö.SEÇMELER(Student), 2003

ŞÜMNÜ S. G. , Fluidized bed, microwave and microwave assisted fluidized bed drying of macaroni beads, Postgraduate, E.İRAZ(Student), 2003

ŞAHİN S., ŞÜMNÜ S. G. , Retardation of staling of microwave baked cakes., Postgraduate, N.SEYHUN(Student), 2002

ŞAHİN S., ŞÜMNÜ S. G. , Development of non-enzymatic browning in microwave baked breads, Postgraduate, D.ZİNCİRKIRAN(Student), 2001

ŞAHİN S., ŞÜMNÜ S. G. , Optimization of microwave baked bread formulation, Postgraduate, Ö.ÖZMUTLU(Student), 2001

Jury Memberships

Award, TÜBA -GEBİP, Orta Doğu Teknik Üniversitesi, June, 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Heat and mass transfer modeling of microwave infrared cooking of zucchini based on Lambert law**
Yazicioglu N., ŞÜMNÜ S. G., ŞAHİN S.
JOURNAL OF FOOD PROCESS ENGINEERING, vol.44, no.12, 2021 (Journal Indexed in SCI)
- II. **Use of Solid Echo Sequence to Monitor Crystallization Kinetics of Mono and Di-Saccharides**
GÜNER S., Grunin L., ŞÜMNÜ S. G., Oztop M. H.
FOOD BIOPHYSICS, vol.16, no.4, pp.502-511, 2021 (Journal Indexed in SCI)
- III. **Encapsulation of Magnesium with Lentil Flour by Using Double Emulsion to Produce Magnesium Enriched Cakes**
Kabakçı C., Şümnü S. G., Şahin S., Öztop H. M.
Food and Bioprocess Technology, vol.14, no.10, pp.1773-1790, 2021 (Journal Indexed in SCI)
- IV. **Pea protein properties are altered following glycation by microwave heating**
ERTUĞRUL Ü., NAMLI S., TAŞ O., KOCADAĞLI T., GÖKMEN V., ŞÜMNÜ S. G., ÖZTOP H. M.
LWT, vol.150, 2021 (Journal Indexed in SCI)
- V. **Correlation between physical and sensorial properties of gummy confections with different formulations during storage**
Tireki S., ŞÜMNÜ S. G., ŞAHİN S.
Journal of Food Science and Technology, vol.58, no.9, pp.3397-3408, 2021 (Journal Indexed in SCI Expanded)
- VI. **Green processing of sour cherry (Prunus cerasus L.) pomace: process optimization for the modification of dietary fibers and property measurements**
Sezer D. B., Ahmed J., ŞÜMNÜ S. G., ŞAHİN S.
JOURNAL OF FOOD MEASUREMENT AND CHARACTERIZATION, vol.15, no.4, pp.3015-3025, 2021 (Journal Indexed in SCI)
- VII. **Encapsulation of Grape Seed Extract in Rye Flour and Whey Protein-Based Electrospun Nanofibers**
Aslaner G., ŞÜMNÜ S. G., ŞAHİN S.
FOOD AND BIOPROCESS TECHNOLOGY, vol.14, no.6, pp.1118-1131, 2021 (Journal Indexed in SCI)
- VIII. **Microwave glycation of soy protein isolate with rare sugar (D-allulose), fructose and glucose**
NAMLI S., ŞÜMNÜ S. G., ÖZTOP H. M.
Food Bioscience, vol.40, 2021 (Journal Indexed in SCI)
- IX. **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 (Journal Indexed in SCI)
- X. **Development of pea flour based active films produced through different homogenization methods and their effects on lipid oxidation**
YILDIZ E., Bayram I., Sumnu G., ŞAHİN S., Ibis O. I.
Food Hydrocolloids, vol.111, 2021 (Journal Indexed in SCI)
- XI. **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 (Journal Indexed in SCI)
- XII. **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 (Journal Indexed in SCI)
- XIII. **Chickpea flour-based biofilms containing gallic acid to be used as active edible films**
Kocakulak S., Sumnu G., ŞAHİN S.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.136, no.26, 2019 (Journal Indexed in SCI)
- XIV. **Physicochemical and Structural Characterization of Microfluidized and Sonicated Legume Starches**
Bitik A., Sumnu G., Oztop M.

- Food and Bioprocess Technology, vol.12, no.7, pp.1144-1156, 2019 (Journal Indexed in SCI)
- XV. **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 (Journal Indexed in SCI)
- XVI. **Determination of pasteurization treatment of liquid whole egg by measuring physical and rheological properties of cake cream**
Uysal R. S. , BOYACI İ. H. , Sumnu G.
JOURNAL OF FOOD PROCESS ENGINEERING, vol.42, no.6, 2019 (Journal Indexed in SCI)
- XVII. **Microcapsule characterization of phenolic powder obtained from strawberry pomace**
Çilek Tatar B., Sumnu G., Oztop M.
Journal of Food Processing and Preservation, vol.43, no.6, 2019 (Journal Indexed in SCI)
- XVIII. **Effects of heat-treated liquid whole egg on cake batter rheology and the quality of baked cake**
Uysal R. S. , Sumnu G., Boyaci I. H.
JOURNAL OF FOOD PROCESS ENGINEERING, vol.42, no.2, 2019 (Journal Indexed in SCI)
- XIX. **Fabrication of gallic acid loaded Hydroxypropyl methylcellulose nanofibers by electrospinning technique as active packaging material**
Aydogdu A., Şümnü S. G. , Şahin S.
CARBOHYDRATE POLYMERS, vol.208, pp.241-250, 2019 (Journal Indexed in SCI)
- XX. **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 (Journal Indexed in SCI)
- XXI. **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 (Journal Indexed in SCI)
- XXII. **Microencapsulation of phenolic compounds extracted from onion (*Allium cepa*) skin**
AKDENİZ B., Sumnu G., ŞAHİN S.
JOURNAL OF FOOD PROCESSING AND PRESERVATION, vol.42, no.7, 2018 (Journal Indexed in SCI)
- XXIII. **Utilization of lentil flour as a biopolymer source for the development of edible films**
Aydogdu A., KIRTİL E., Sumnu G., Oztop M. H. , Aydogdu Y.
JOURNAL OF APPLIED POLYMER SCIENCE, vol.135, no.23, 2018 (Journal Indexed in SCI)
- XXIV. **Development of novel pea flour-based nanofibres by electrospinning method**
OĞUZ S., TAM N., Aydogdu A., Sumnu G., ŞAHİN S.
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.53, no.5, pp.1269-1277, 2018 (Journal Indexed in SCI)
- XXV. **Enhancement of storage stability of wheat germ oil by encapsulation**
KARADENİZ M., ŞAHİN S., Sumnu G.
Industrial Crops and Products, vol.114, pp.14-18, 2018 (Journal Indexed in SCI)
- XXVI. **A novel electrospun hydroxypropyl methylcellulose/polyethylene oxide blend nanofibers: Morphology and physicochemical properties**
AYDOĞDU A., Sumnu G., ŞAHİN S.
CARBOHYDRATE POLYMERS, vol.181, pp.234-246, 2018 (Journal Indexed in SCI)
- XXVII. **Effects of addition of different fibers on rheological characteristics of cake batter and quality of cakes**
Aydogdu A., Sumnu G., ŞAHİN S.
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.55, no.2, pp.667-677, 2018 (Journal Indexed in SCI)
- XXVIII. **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 (Journal Indexed in SCI)

- XXIX. **Characterization of different double-emulsion formulations based on food-grade emulsifiers and stabilizers**
PULATSU E. T. , ŞAHİN S., Sumnu G.
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.39, no.7, pp.996-1002, 2018 (Journal Indexed in SCI)
- XXX. **Influence of solution properties and pH on the fabrication of electrospun lentil flour/HPMC blend nanofibers**
Tam N., OĞUZ S., Aydogdu A., Sumnu G., ŞAHİN S.
FOOD RESEARCH INTERNATIONAL, vol.102, pp.616-624, 2017 (Journal Indexed in SCI)
- XXXI. **NMR relaxometry as a tool to understand the effect of microwave heating on starch-water interactions and gelatinization behavior**
Ozel B., DAG D., KILERCIOGLU M., ŞÜMNÜ S. G. , Oztop M. H.
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.83, pp.10-17, 2017 (Journal Indexed in SCI)
- XXXII. **Physicochemical, rheological, and sensory properties of low-fat ice cream designed by double emulsions**
TEKIN E., ŞAHİN S., Sumnu G.
EUROPEAN JOURNAL OF LIPID SCIENCE AND TECHNOLOGY, vol.119, no.9, 2017 (Journal Indexed in SCI)
- XXXIII. **The effects of emulsifier type, phase ratio, and homogenization methods on stability of the double emulsion**
YILDIRIM M., Sumnu G., ŞAHİN S.
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.38, no.6, pp.807-814, 2017 (Journal Indexed in SCI)
- XXXIV. **Preparation and characterization of W/O/W type double emulsion containing PGPR-lecithin mixture as lipophilic surfactant**
ALTUNTAS O. Y. , Sumnu G., ŞAHİN S.
JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, vol.38, no.4, pp.486-493, 2017 (Journal Indexed in SCI)
- XXXV. **Rheology, particle-size distribution, and stability of low-fat mayonnaise produced via double emulsions**
YILDIRIM M., Sumnu G., ŞAHİN S.
FOOD SCIENCE AND BIOTECHNOLOGY, vol.25, no.6, pp.1613-1618, 2016 (Journal Indexed in SCI)
- XXXVI. **Effect of Drying on Porous Characteristics of Orange Peel**
Tamer C., Isci A., Kutlu N., Sakiyan O., ŞAHİN S., Sumnu G.
INTERNATIONAL JOURNAL OF FOOD ENGINEERING, vol.12, no.9, pp.921-928, 2016 (Journal Indexed in SCI)
- XXXVII. **Pore Development, Oil and Moisture Distribution in Crust and Core Regions of Potatoes During Frying**
ISIK B., ŞAHİN S., Sumnu G.
FOOD AND BIOPROCESS TECHNOLOGY, vol.9, no.10, pp.1653-1660, 2016 (Journal Indexed in SCI)
- XXXVIII. **Effect of different flours on quality of legume cakes to be baked in microwave-infrared combination oven and conventional oven**
OZKAHRAMAN B. C. , Sumnu G., ŞAHİN S.
JOURNAL OF FOOD SCIENCE AND TECHNOLOGY-MYSORE, vol.53, no.3, pp.1567-1575, 2016 (Journal Indexed in SCI)
- XXXIX. **Characterization of structure of gluten-free breads by using X-ray microtomography**
DEMİRKESEN i., Kelkar S., Campanella O. H. , ŞÜMNÜ S. G. , ŞAHİN S., OKOS m.
FOOD HYDROCOLLOIDS, vol.36, pp.37-44, 2014 (Journal Indexed in SCI)
- XL. **A Study on Staling Characteristics of Gluten-Free Breads Prepared with Chestnut and Rice Flours**
Demirkesen I., Campanella O. H. , ŞÜMNÜ S. G. , ŞAHİN S., Hamaker B. R.
FOOD AND BIOPROCESS TECHNOLOGY, vol.7, no.3, pp.806-820, 2014 (Journal Indexed in SCI)
- XLI. **Storage and Baking Stability of Encapsulated Sour Cherry Phenolic Compounds Prepared from Micro- and Nano-Suspensions**
Luca A., ÇİLEK TATAR B., Hasirci V., ŞAHİN S., ŞÜMNÜ S. G.
FOOD AND BIOPROCESS TECHNOLOGY, vol.7, no.1, pp.204-211, 2014 (Journal Indexed in SCI)
- XLII. **Effect of Ultrasound-Assisted Osmotic Dehydration as a Pretreatment on Deep Fat Frying of Potatoes**

- Karizaki V. M. , ŞAHİN S., Sumnu G., Mosavian M. T. H. , Luca A.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.6, no.12, pp.3554-3563, 2013 (Journal Indexed in SCI)
- XLIII. **Ohmic Tempering of Frozen Potato Puree**
 Seyhun N., Ramaswamy H. S. , Zhu S., Sumnu G., ŞAHİN S.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.6, no.11, pp.3200-3205, 2013 (Journal Indexed in SCI)
- XLIV. **Effect of Degritting of Phenolic Extract from Sour Cherry Pomace on Encapsulation Efficiency-
 Production of Nano-suspension**
 LUCA A., Cilek B., Hasirci V., ŞAHİN S., Sumnu G.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.6, no.9, pp.2494-2502, 2013 (Journal Indexed in SCI)
- XLV. **Image Analysis of Gluten-free Breads Prepared with Chestnut and Rice Flour and Baked in Different
 Ovens**
 Demirkesen I., ŞÜMNÜ S. G. , ŞAHİN S.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.6, no.7, pp.1749-1758, 2013 (Journal Indexed in SCI)
- XLVI. **Usage of solar-assisted spouted bed drier in drying of pea**
 ŞAHİN S., Sumnu G., Tunaboyu F.
 FOOD AND BIOPRODUCTS PROCESSING, vol.91, pp.271-278, 2013 (Journal Indexed in SCI)
- XLVII. **Microwave Frying Compared with Conventional Frying via Numerical Simulation**
 Şensoy I., Şahin S., Sumnu G.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.6, pp.1414-1419, 2013 (Journal Indexed in SCI)
- XLVIII. **Quality of Gluten-Free Bread Formulations Baked in Different Ovens**
 Demirkesen I., ŞÜMNÜ S. G. , ŞAHİN S.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.6, no.3, pp.746-753, 2013 (Journal Indexed in SCI)
- XLIX. **Extraction of phenolic compounds from melissa using microwave and ultrasound**
 INCE A. E. , ŞAHİN S., ŞÜMNÜ S. G.
 TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, vol.37, no.1, pp.69-75, 2013 (Journal Indexed in SCI)
- L. **Microencapsulation of phenolic compounds extracted from sour cherry pomace: effect of
 formulation, ultrasonication time and core to coating ratio**
 Cilek B., Luca A., Hasirci V., ŞAHİN S., Sumnu G.
 EUROPEAN FOOD RESEARCH AND TECHNOLOGY, vol.235, no.4, pp.587-596, 2012 (Journal Indexed in SCI)
- LI. **Spouted bed and microwave-assisted spouted bed drying of parboiled wheat**
 Kahyaoglu L. N. , Sahin S., Sumnu G.
 FOOD AND BIOPRODUCTS PROCESSING, vol.90, pp.301-308, 2012 (Journal Indexed in SCI)
- LII. **Microwave Assisted Extraction of Phenolic Compounds from Sour Cherry Pomace**
 Simsek M., Sumnu G., Sahin S.
 SEPARATION SCIENCE AND TECHNOLOGY, vol.47, no.8, pp.1248-1254, 2012 (Journal Indexed in SCI)
- LIII. **A Study on Degree of Starch Gelatinization in Cakes Baked in Three Different Ovens**
 Sakiyan O., Sumnu G., ŞAHİN S., Meda V., KÖKSEL H., Chang P.
 FOOD AND BIOPROCESS TECHNOLOGY, vol.4, no.7, pp.1237-1244, 2011 (Journal Indexed in SCI)
- LIV. **Optimisation of formulations and infrared-microwave combination baking conditions of chestnut-
 rice breads**
 Demirkesen I., Sumnu G., ŞAHİN S., Uysal N.
 INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.46, no.9, pp.1809-1815, 2011 (Journal
 Indexed in SCI)
- LV. **Utilization of chestnut flour in gluten-free bread formulations**
 Demirkesen I., MERT B., Sumnu G., ŞAHİN S.
 JOURNAL OF FOOD ENGINEERING, vol.101, no.3, pp.329-336, 2010 (Journal Indexed in SCI)
- LVI. **Quantitative analysis of macro and micro-structure of gluten-free rice cakes containing different
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