

Prof. FERİDE SEVERCAN

Personal Information

Email: feride@metu.edu.tr

Advising Theses

- SEVERCAN F., Biophysical characterization and diagnosis of obesity from adipose tissue by fourier transform infrared spectroscopy and imaging, Doctorate, F.Küçük(Student), 2017
- SEVERCAN F., Elucidating the patterns in mid-winter waterbird surveys by using climate, lake water level fluctuations and macrophyte records, Postgraduate, K.Badem(Student), 2017
- SEVERCAN F., Investigation of the lipid metabolic changes induced by novel alpha tocopherol analog (TC6OH) in luminal a type breast cancer cells, Doctorate, S.Gök(Student), 2017
- SEVERCAN F., Effects of novel compound derived from vitamin e on prostate cancer cell line, Doctorate, N.Ergen(Student), 2016
- SEVERCAN F., Biophysical characterization of proteins in solution and human fluids for cancer diagnosis applications using fourier transform infrared spectroscopy, Doctorate, S.Abbas(Student), 2016
- SEVERCAN F., BANERJEE S., Molecular characterization of the effects of valdecoxib on colon cancer cell lines (ht29 & sw620) using ATR-FTIR spectroscopy, Postgraduate, A.İnan(Student), 2014
- SEVERCAN F., Determination of inbred obese mouse adipose tissue lipid profiles by high performance liquid chromatography, Postgraduate, T.Başer(Student), 2013
- SEVERCAN F., Attenuated total reflectance fourier transform infrared spectroscopy of fluid systems : case study applications to diagnosis and screening in biomedical and food areas, Postgraduate, S.Gök(Student), 2013
- SEVERCAN F., Characterization and identification of human mesenchymal stem cells at molecular level, Doctorate, C.Aksoy(Student), 2012
- SEVERCAN F., BANERJEE S., Investigation of drug-related changes on bone tissues of rat animal models in healthy and disease states, Doctorate, Ş.Garip(Student), 2012
- SEVERCAN F., BANERJEE S., Macromolecular characterization of apidose tissues in inbred obese mouse models, Postgraduate, İ.Şen(Student), 2012
- SEVERCAN F., Characterization of skeletal muscle lipids in obese mice lines, Postgraduate, E.Aras(Student), 2012
- SEVERCAN F., Structural and functional investigation of the interaction of agomelatine with model membranes, Postgraduate, S.Ergün(Student), 2012
- SEVERCAN F., The effects of streptozotocin induced-diabetes on rat testes and the recovery role of vitamin c, Postgraduate, D.Güldağ(Student), 2012
- SEVERCAN F., Study of bone characteristics and muscle quality in metabolic disorders, Doctorate, Ö.Bozkurt(Student), 2012
- SEVERCAN F., The effects of radioprotectant amifostine on irradiated rat brain and liver tissues, Doctorate, G.Çakmak(Student), 2010
- SEVERCAN F., Interactions of cholesterol reducing agent simvastatin with charged phospholipid model membranes, Postgraduate, E.Sarışık(Student), 2010
- SEVERCAN F., The effects of selenium on stz-induced diabetic rat kidney plasma membrane, Postgraduate, R.Gurbanov(Student), 2010
- SEVERCAN F., Detection of bladder tumor recurrence by fourier transform infrared spectroscopy as a novel method, Postgraduate, Ö.Zelal(Student), 2009
- SEVERCAN F., Molecular investigation of ptz-induced epileptic activities in rat brain cell membranes and the effects of vigabatrin, Doctorate, S.Görgülü(Student), 2009

SEVERCAN F., Interactions of cholesterol reducing agent simvastatin with phospholipid model membranes, Postgraduate, M.Koçak(Student), 2007

SEVERCAN F., The molecular investigation of the effects of simvastatin, a cholesterol reducing drug, on different rat skeletal muscle tissues, Postgraduate, N.Şimşek(Student), 2007

SEVERCAN F., The effect of diabetes on rat skeletal muscle tissues at molecular level, Postgraduate, Ö.Bozkurt(Student), 2006

SEVERCAN F., Effects of hydrogen peroxide bleaching on human dentin and enamel microstructure and function, Postgraduate, K.Gökduman(Student), 2005

SEVERCAN F., The characterization of bacteria with Fourier Transform Infrared (FTIR) spectroscopy, Postgraduate, S.Garip(Student), 2005

SEVERCAN F., Preliminary approach for the determination of fish exuded kairomone using fourier transform infrared spectroscopy, Postgraduate, A.Özge(Student), 2005

SEVERCAN F., Expression, purification and functional analysis of advenovirus type 5 e4 orf3 protein, Postgraduate, E.Koyuncu(Student), 2004

SEVERCAN F., Biophysical investigation of the effects of antioxidants on normal and diabetic rat bone tissues at molecular level, Doctorate, H.Boyar(Student), 2004

SEVERCAN F., Molecular investigation of the effects of antioxidants on rat brain tissues, Postgraduate, S.Banu(Student), 2003

SEVERCAN F., Molecular approach with Fourier transform infrared spectroscopy to different pathological systems (diabetes mellitus and arteriovenous malformation) with various treatments, Doctorate, N.Toyran(Student), 2003

SEVERCAN F., Infrared spectroscopic study of diabetic rat heart crude membranes., Postgraduate, N.Kaptan(Student), 2002

SEVERCAN F., Spectroscopic investigation of vitamin D3-melittin-model membrane interaction, Postgraduate, S.Aksu(Student), 2002

SEVERCAN F., The effects of gamma irradiation on hazelnut tissue at molecular level by fourier transform infrared spectroscopy, Postgraduate, A.Doğan(Student), 2001

SEVERCAN F., Construction and analysis of a soluble version of the membrane-attached cytochrome Cy in Rhodobacter capsulatus, Postgraduate, Y.Öztürk(Student), 2001

SEVERCAN F., Molecular dynamics of pig citrate synthase, Postgraduate, Ö.Ünver(Student), 2000

SEVERCAN F., Interaction of gramicidin S peptide with dipalmitoylphosphatidylcholine (DPPC) model membrane and the effect of vitamin D2 steroid: An FT-IR and thermodynamics study, Postgraduate, M.Khamies(Student), 1999

SEVERCAN F., The Effect of divalent ions on antioxidant-phospholipid model membrane interactions, Postgraduate, N.Toyran(Student), 1999

SEVERCAN F., Spectroscopic studies of melittin in solution and in lipid bilayers., Postgraduate, H.Okan(Student), 1998

SEVERCAN F., The Effect of vitamin D2 on phospholipid model membranes and protein-lipid interactions, Postgraduate, F.Eker(Student), 1997

SEVERCAN F., Effect of metal ions on nucleic acid protein (melittin) and drug (tamoxifen) phospholipid model membrane interactions, Postgraduate, E.Süleymanoğlu(Student), 1995

SEVERCAN F., Interaction of vitamin E with cholesterol-containing phospholipid model membranes: an FTIR study, Postgraduate, Ü.Baykal(Student), 1995

SEVERCAN F., Interaction of estrogen and tamoxifen with phospholipid model membranes: an ftir study., Postgraduate, H.Boyar(Student), 1995

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Strain and Depot-specific Differences in Adipose Tissues of Obese BFMI Mice
Dogan A., Sen I., Severcan M., Brockmann G., Severcan F.
In Vivo, vol.37, no.4, pp.1672-1679, 2023 (SCI-Expanded)
- II. The recovery effect of Vitamin C on structural alterations due to Streptozotocin-Induced diabetes in rat testicular tissues

- KÜÇÜK BALOĞLU F., Guldag Tas D., Yilmaz O., Severcan F.
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.288, 2023 (SCI-Expanded)
- III. **Rapid diagnosis of malignant pleural mesothelioma and its discrimination from lung cancer and benign exudative effusions using blood serum**
Yonar D., Severcan M., Gurbanov R., Sandal A., Yilmaz U., Emri S., Severcan F.
Biochimica et Biophysica Acta - Molecular Basis of Disease, vol.1868, no.10, 2022 (SCI-Expanded)
- IV. **The structural effects of Vitamin A deficiency on biological macromolecules due to ethanol consumption and withdrawal: An FTIR study with chemometrics**
ELİBOL B., Severcan M., Jakubowska-Dogru E., DURSUN İ., SEVERCAN F.
JOURNAL OF BIOPHOTONICS, vol.15, no.7, 2022 (SCI-Expanded)
- V. **Biomolecular changes and subsequent time-dependent recovery in hippocampal tissue after experimental mild traumatic brain injury**
Ustaoglu S. G., Ali M. H. M., Rakib F., Blezer E. L. A., Van Heijningen C. L., Dijkhuizen R. M., Severcan F.
Scientific Reports, vol.11, no.1, 2021 (SCI-Expanded)
- VI. **Vitamin E Derivative with Modified Side Chain Induced Apoptosis by Modulating the Cellular Lipids and Membrane Dynamics in MCF7 Cells**
Gok S., Kuzmenko O., Babinskyi A., Severcan F.
CELL BIOCHEMISTRY AND BIOPHYSICS, vol.79, no.2, pp.271-287, 2021 (SCI-Expanded)
- VII. **Discrimination of heavy metal acclimated environmental strains by chemometric analysis of FTIR spectra**
Kepenek E. S., Severcan M., GÖZEN A. G., SEVERCAN F.
ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.202, 2020 (SCI-Expanded)
- VIII. **Methylation, sugar puckering and Z-form status of DNA from a heavy metal-acclimated freshwater Gordonia sp.**
Gurbanov R., Tuncer S., Mingu S., Severcan F., Gözen A. G.
JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY B-BIOLOGY, vol.198, 2019 (SCI-Expanded)
- IX. **The effects of radioprotectant and potential antioxidant agent amifostine on the structure and dynamics of DPPC and DPPG liposomes**
Arslan G. C., SEVERCAN F.
BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, vol.1861, no.6, pp.1240-1251, 2019 (SCI-Expanded)
- X. **Molecular characterization of acutely and gradually heavy metal acclimated aquatic bacteria by FTIR spectroscopy**
Kepenek E. S., GÖZEN A. G., Severcan F.
JOURNAL OF BIOPHOTONICS, vol.12, no.5, 2019 (SCI-Expanded)
- XI. **Interaction of the cholesterol reducing agent simvastatin with zwitterionic DPPC and charged DPPG phospholipid membranes**
Sariisik E., KOÇAK M., Baloglu F. K., Severcan F.
BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, vol.1861, no.4, pp.810-818, 2019 (SCI-Expanded)
- XII. **Diagnosis of malignant pleural mesothelioma from pleural fluid by Fourier transform-infrared spectroscopy coupled with chemometrics**
Abbas S., Ozek N. S., Emri S., KÖKSAL D., Severcan M., Severcan F.
JOURNAL OF BIOMEDICAL OPTICS, vol.23, no.10, 2018 (SCI-Expanded)
- XIII. **Side-Effects of Convulsive Seizures and Anti-Seizure Therapy on Bone in a Rat Model of Epilepsy**
Ustaoglu S. G., EVİS Z., İLBAY G., Boskey A. L., Severcan F.
APPLIED SPECTROSCOPY, vol.72, no.5, pp.689-705, 2018 (SCI-Expanded)
- XIV. **Aspects of silver tolerance in bacteria: infrared spectral changes and epigenetic clues**
Gurbanov R., Ozek N. S., Tunçer S., Severcan F., Gözen A. G.
JOURNAL OF BIOPHOTONICS, vol.11, 2018 (SCI-Expanded)
- XV. **Relapsing-Remitting Multiple Sclerosis diagnosis from cerebrospinal fluids via Fourier transform infrared spectroscopy coupled with multivariate analysis**
Yonar D., Ocek L., Tiftikcioglu B. I., Zorlu Y., Severcan F.

- SCIENTIFIC REPORTS, vol.8, 2018 (SCI-Expanded)
- XVI. **Rapid classification of heavy metal-exposed freshwater bacteria by infrared spectroscopy coupled with chemometrics using supervised method**
Gurbanov R., Gözen A. G., Severcan F.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.189, pp.282-290, 2018 (SCI-Expanded)
- XVII. **Triglyceride dependent differentiation of obesity in adipose tissues by FTIR spectroscopy coupled with chemometrics**
Baloglu F. K., BALOĞLU O., Heise S., Brockmann G., Severcan F.
JOURNAL OF BIOPHOTONICS, vol.10, no.10, pp.1345-1355, 2017 (SCI-Expanded)
- XVIII. **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)
- XIX. **Valdecoxib Recovers the Lipid Composition, Order and Dynamics in Colon Cancer Cell Lines Independent of COX-2 Expression: An ATR-FTIR Spectroscopy Study.**
Inan G., GOK S., Banerjee S., SEVERCAN F.
Applied spectroscopy, vol.71, pp.105-117, 2017 (SCI-Expanded)
- XX. **Diagnostic Utility of Mesothelin, Osteopontin and Megakaryocyte Potentiation Factor in Turkish Patients with Malignant Mesothelioma**
Emri S., Dikmen G., SARINÇ ULAŞLI S., Esençagli D., Yilmaz U., ŞİMŞEK ÖZEK N., Severcan F., OKUR H., Akbiyik F.
JOURNAL OF THORACIC ONCOLOGY, vol.12, no.1, 2017 (SCI-Expanded)
- XXI. **Differentiation of Chronic and Aggressive Periodontitis by FTIR Spectroscopy**
Ozek N. S., Zeller I., Renaud D. E., Gumus P., NİZAM N., Severcan F., BUDUNELİ N. G., Scott D. A.
JOURNAL OF DENTAL RESEARCH, vol.95, no.13, pp.1472-1478, 2016 (SCI-Expanded)
- XXII. **Early Alterations in Bone Characteristics of Type I Diabetic Rat Femur: A Fourier Transform Infrared (FT-IR) Imaging Study**
Bozkurt O., BİLGİN M. D., EVİS Z., Pleshko N., Severcan F.
APPLIED SPECTROSCOPY, vol.70, no.12, pp.2005-2015, 2016 (SCI-Expanded)
- XXIII. **Bladder cancer diagnosis from bladder wash by Fourier transform infrared spectroscopy as a novel test for tumor recurrence**
Gok S., Aydin O. Z., Sural Y. S., Zorlu F., Bayol U., Severcan F.
JOURNAL OF BIOPHOTONICS, vol.9, no.9, pp.967-975, 2016 (SCI-Expanded)
- XXIV. **Embryo Quality Assessment in in Vitro Fertilization (IVF) using metabolite footprints secreted to human embryo culture media by ATR-FTIR spectroscopy and multivariate analysis**
Garip S., Ceyhan S. T., Korkmaz C., Muge A., Guney E., Bal E., Severcan F.
HUMAN REPRODUCTION, vol.31, pp.227-228, 2016 (SCI-Expanded)
- XXV. **Restoring effect of selenium on the molecular content, structure and fluidity of diabetic rat kidney brush border cell membrane**
Gurbanov R., Bilgin M., Severcan F.
BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, vol.1858, no.4, pp.845-854, 2016 (SCI-Expanded)
- XXVI. **Structural effects of simvastatin on liver rate tissue: Fourier transform infrared and Raman microspectroscopic studies**
Garip S., Bayari S. H., Severcan M., Abbas S., Lednev I. K., Severcan F.
JOURNAL OF BIOMEDICAL OPTICS, vol.21, no.2, 2016 (SCI-Expanded)
- XXVII. **Monitoring radiation induced alterations in biological systems, from molecules to tissues, through infrared spectroscopy**
Demir P., Severcan F.
APPLIED SPECTROSCOPY REVIEWS, vol.51, no.10, pp.839-863, 2016 (SCI-Expanded)
- XXVIII. **Structural and functional damages of whole body ionizing radiation on rat brain homogenate membranes and protective effect of amifostine**

- ÇAKMAK G., Sevencan M., Zorlu F., Sevencan F.
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.92, no.12, pp.837-848, 2016 (SCI-Expanded)
- XXIX. **Effect of thermal treatment on secondary structure and conformational change of mushroom polyphenol oxidase (PPO) as food quality related enzyme: A FTIR study**
Baltacioglu H., Bayindirli A., Sevencan M., Sevencan F.
FOOD CHEMISTRY, vol.187, pp.263-269, 2015 (SCI-Expanded)
- XXX. **Quick Discrimination of Heavy Metal Resistant Bacterial Populations Using Infrared Spectroscopy Coupled with Chemometrics**
Gurbanov R., Ozek N. S., Gözen A. G., Sevencan F.
ANALYTICAL CHEMISTRY, vol.87, pp.9653-9661, 2015 (SCI-Expanded)
- XXXI. **Infrared Spectroscopy as a Novel Approach in Differential Diagnosis of Malignant Pleural Mesothelioma from Lung Cancer Using Pleural Fluid**
Abbas S., Ozek N. S., KÖKSAL D., Sevencan M., Emri S. A., Sevencan F.
JOURNAL OF THORACIC ONCOLOGY, vol.10, no.9, 2015 (SCI-Expanded)
- XXXII. **Differentiation of Mesothelioma from Lung Cancer and Healthy Individuals Using Human Serum by ATR-FTIR Spectroscopy Coupled with Chemometrics**
Emri S. A., Yonar D., SANDAL A., Yilmaz U., Sevencan F.
JOURNAL OF THORACIC ONCOLOGY, vol.10, no.9, 2015 (SCI-Expanded)
- XXXIII. **Lipid Profiles of Adipose and Muscle Tissues in Mouse Models of Juvenile Onset of Obesity Without High Fat Diet Induction: A Fourier Transform Infrared (FT-IR) Spectroscopic Study**
Sen I., Bozkurt O., Aras E., Heise S., Brockmann G. A., Sevencan F.
APPLIED SPECTROSCOPY, vol.69, no.6, pp.679-688, 2015 (SCI-Expanded)
- XXXIV. **Differentiation of Anatolian honey samples from different botanical origins by ATR-FTIR spectroscopy using multivariate analysis**
Gok S., Sevencan M., Goormaghtigh E., KANDEMİR İ., Sevencan F.
FOOD CHEMISTRY, vol.170, pp.234-240, 2015 (SCI-Expanded)
- XXXV. **Effect of Molecular Crowding on the Structure and Dynamics of Human Apo and Holo Transferrin using 2D-IR Correlation Spectroscopy**
Abbas S., Sevencan F., Haris P. I.
BIOPHYSICAL JOURNAL, vol.108, no.2, 2015 (SCI-Expanded)
- XXXVI. **Phylogeny of cultivated and wild wheat species using ATR-FTIR spectroscopy**
Demir P., ÖNDE S., Sevencan F.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.135, pp.757-763, 2015 (SCI-Expanded)
- XXXVII. **Vitamin A deficiency induces structural and functional alterations in the molecular constituents of the rat hippocampus**
Elibol-Can B., Simsek-Ozek N., Sevencan F., Sevencan M., Jakubowska-Dogru E.
BRITISH JOURNAL OF NUTRITION, vol.113, no.1, pp.45-55, 2015 (SCI-Expanded)
- XXXVIII. **Ionizing Radiation Induces Structural and Functional Damage on the Molecules of Rat Brain Homogenate Membranes: A Fourier Transform Infrared (FT-IR) Spectroscopic Study**
Demir P., AKKAŞ S. B., Sevencan M., Zorlu F., Sevencan F.
APPLIED SPECTROSCOPY, vol.69, no.1, pp.154-164, 2015 (SCI-Expanded)
- XXXIX. **FTIR imaging of structural changes in visceral and subcutaneous adiposity and brown to white adipocyte transdifferentiation**
Baloglu F. K., Garip S., Heise S., Brockmann G., Sevencan F.
ANALYST, vol.140, no.7, pp.2205-2214, 2015 (SCI-Expanded)
- XL. **Epileptic seizures induce structural and functional alterations on brain tissue membranes**
Turker S., Sevencan M., İLBAY G., SEVERCAN F.
BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, vol.1838, no.12, pp.3088-3096, 2014 (SCI-Expanded)
- XLI. **Agomelatine strongly interacts with zwitterionic DPPC and charged DPPG membranes**
Ergun S., Demir P., Uzbay T., SEVERCAN F.

- BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, vol.1838, no.11, pp.2798-2806, 2014 (SCI-Expanded)
- XLII. FTIR spectroscopy offers hints towards widespread molecular changes in cobalt-acclimated freshwater bacteria**
Kardaş M., Gözen A. G., Severcan F.
AQUATIC TOXICOLOGY, vol.155, pp.15-23, 2014 (SCI-Expanded)
- XLIII. Interactions of tamoxifen with distearoyl phosphatidylcholine multilamellar vesicles: FTIR and DSC studies**
Bilge D., ŞAHİN İ., KAZANCI N., SEVERCAN F.
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.130, pp.250-256, 2014 (SCI-Expanded)
- XLIV. Co-doping of hydroxyapatite with zinc and fluoride improves mechanical and biological properties of hydroxyapatite**
Uysal I., Severcan F., TEZCANER A., EVİS Z.
PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL, vol.24, no.4, pp.340-349, 2014 (SCI-Expanded)
- XLV. Structural investigation of donor age effect on human bone marrow mesenchymal stem cells: FTIR spectroscopy and imaging**
Aksoy C., AERTS KAYA F. S. F., KUŞKONMAZ B. B., Uckan D., SEVERCAN F.
AGE, vol.36, no.4, 2014 (SCI-Expanded)
- XLVI. Investigation of Compositional, Structural, and Dynamical Changes of Pentylenetetrazol-Induced Seizures on a Rat Brain by FT-IR Spectroscopy**
Turker S., İLBAY G., Severcan M., Severcan F.
ANALYTICAL CHEMISTRY, vol.86, no.3, pp.1395-1403, 2014 (SCI-Expanded)
- XLVII. Structural and functional characterization of simvastatin-induced myotoxicity in different skeletal muscles**
Ozek N. S., Bal I. B., SARA M. Y., Onur R., Severcan F.
BIOCHIMICA ET BIOPHYSICA ACTA-GENERAL SUBJECTS, vol.1840, no.1, pp.406-415, 2014 (SCI-Expanded)
- XLVIII. Concentration-Based Measurement Studies of L-Tryptophan Using Terahertz Time-Domain Spectroscopy (THz-TDS)**
Ozer Z., Gok S., ALTAN H., Severcan F.
APPLIED SPECTROSCOPY, vol.68, no.1, pp.95-100, 2014 (SCI-Expanded)
- XLIX. Concentration-dependent effect of melatonin on DSPC membrane**
ŞAHİN İ., Bilge D., KAZANCI N., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.1052, pp.183-188, 2013 (SCI-Expanded)
- L. Epileptic seizure-induced structural and functional changes in rat femur and tibia bone tissues: a Fourier transform infrared imaging study**
Garip S., ŞAHİN D., Severcan F.
JOURNAL OF BIOMEDICAL OPTICS, vol.18, no.11, 2013 (SCI-Expanded)
- LI. Characterization by Fourier transform infrared spectroscopy of hydroxyapatite co-doped with zinc and fluoride**
Uysal I., Severcan F., EVİS Z.
CERAMICS INTERNATIONAL, vol.39, no.7, pp.7727-7733, 2013 (SCI-Expanded)
- LII. Acyl chain length and charge effect on Tamoxifen-lipid model membrane interactions**
Bilge D., KAZANCI N., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.1040, pp.75-82, 2013 (SCI-Expanded)
- LIII. Structural and mechanical characteristics of nanohydroxyapatite doped with zinc and chloride**
Uysal I., Severcan F., EVİS Z.
ADVANCES IN APPLIED CERAMICS, vol.112, no.3, pp.149-157, 2013 (SCI-Expanded)
- LIV. Structural alterations in rat liver proteins due to streptozotocin-induced diabetes and the recovery effect of selenium: Fourier transform infrared microspectroscopy and neural network study**
Bozkurt O., Bayari S. H., Severcan M., Krafft C., Popp J., Severcan F.
JOURNAL OF BIOMEDICAL OPTICS, vol.17, no.7, 2012 (SCI-Expanded)

- LV. **Bone Marrow Mesenchymal Stem Cells in Patients with Beta Thalassemia Major: Molecular Analysis with Attenuated Total Reflection-Fourier Transform Infrared Spectroscopy Study as a Novel Method**
Aksoy C., Guliyev A., Kilic E., Uckan D., Severcan F.
STEM CELLS AND DEVELOPMENT, vol.21, no.11, pp.2000-2011, 2012 (SCI-Expanded)
- LVI. **Amifostine, a radioprotectant agent, protects rat brain tissue lipids against ionizing radiation induced damage: An FTIR microspectroscopic imaging study**
Cakmak G., Miller L. M., Zorlu F., Severcan F.
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.520, no.2, pp.67-73, 2012 (SCI-Expanded)
- LVII. **Impacts of salinity and fish-exuded kairomone on the survival and macromolecular profile of Daphnia pulex**
Bezirci G., AKKAŞ S. B., Rinke K., YILDIRIM F., Kalaylioglu Z. I., Severcan F., BEKLİOĞLU M.
ECOTOXICOLOGY, vol.21, no.2, pp.601-614, 2012 (SCI-Expanded)
- LVIII. **Celecoxib reduces fluidity and decreases metastatic potential of colon cancer cell lines irrespective of COX-2 expression**
Sade A., Tuncay S., Cimen I., Severcan F., BANERJEE S.
BIOSCIENCE REPORTS, vol.32, no.1, pp.35-44, 2012 (SCI-Expanded)
- LIX. **Biophysical and microbiological study of high hydrostatic pressure inactivation of Bovine Viral Diarrheaviruses type 1 on serum**
CEYLAN Ç., Severcan F., ÖZKUL A., Severcan M., Bozoglu F., Taheri N.
VETERINARY MICROBIOLOGY, vol.154, pp.266-271, 2012 (SCI-Expanded)
- LX. **Role of Vibrational Spectroscopy in Stem Cell Research**
Aksoy C., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.27, no.3, pp.167-184, 2012 (SCI-Expanded)
- LXI. **The Effects of Short-Term Chronic Ethanol Intoxication and Ethanol Withdrawal on the Molecular Composition of the Rat Hippocampus by FT-IR Spectroscopy**
Elibol-Can B., Jakubowska-Dogru E., Severcan M., Severcan F.
ALCOHOLISM-CLINICAL AND EXPERIMENTAL RESEARCH, vol.35, no.11, pp.2050-2062, 2011 (SCI-Expanded)
- LXII. **High dose simvastatin administration induces changes in the structure and concentration of liver microsomal membrane proteins**
Ozgun K., Ozek N. S., Severcan M., Severcan F.
AMINO ACIDS, vol.41, 2011 (SCI-Expanded)
- LXIII. **Toward a protein profile of the zooplankton Daphnia pulex exposed to the pesticide cypermethrin, using ATR-FTIR spectroscopy as a novel method**
AKKAŞ S. B., Severcan M., BEKLİOĞLU M., Severcan F.
AMINO ACIDS, vol.41, 2011 (SCI-Expanded)
- LXIV. **Investigation of the effects of different epileptic activities on cell membrane proteins reveals diagnostic information**
Turker S., Severcan M., Ilbay G., Severcan F.
AMINO ACIDS, vol.41, 2011 (SCI-Expanded)
- LXV. **Screening of Protective Effect of Amifostine on Radiation-Induced Structural and Functional Variations in Rat Liver Microsomal Membranes by FT-IR Spectroscopy**
Cakmak G., Zorlu F., Severcan M., Severcan F.
ANALYTICAL CHEMISTRY, vol.83, no.7, pp.2438-2444, 2011 (SCI-Expanded)
- LXVI. **Convulsant agent pentylenetetrazol does not alter the structural and dynamical properties of dipalmitoylphosphatidylcholine model membranes**
Turker S., Wassall S., Stillwell W., Severcan F.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.54, no.2, pp.379-386, 2011 (SCI-Expanded)
- LXVII. **Effects of the non-steroidal anti-inflammatory drug celecoxib on cholesterol containing distearoyl phosphatidylcholine membranes**
Sade A., BANERJEE S., Severcan F.
SPECTROSCOPY-BIOMEDICAL APPLICATIONS, vol.25, pp.177-185, 2011 (SCI-Expanded)

- LXVIII. **Structural characterization of recombinant bovine Go alpha by spectroscopy and homology modeling**
MEGA TİBER P., Orun O., Nacar C., Sezerman U. O., Severcan F., Severcan M., Matagne A., KAN B.
SPECTROSCOPY-BIOMEDICAL APPLICATIONS, vol.26, pp.213-229, 2011 (SCI-Expanded)
- LXIX. **Celecoxib-loaded liposomes: effect of cholesterol on encapsulation and in vitro release characteristics**
DENİZ A., Sade A., Severcan F., KESKİN D., TEZCANER A., BANERJEE S.
BIOSCIENCE REPORTS, vol.30, no.5, pp.365-373, 2010 (SCI-Expanded)
- LXX. **FT-IR spectroscopy in diagnosis of diabetes in rat animal model**
SEVERCAN F., Bozkurt O., Gurbanov R., Gorgulu G.
JOURNAL OF BIOPHOTONICS, vol.3, pp.621-631, 2010 (SCI-Expanded)
- LXXI. **Determination of simvastatin-induced changes in bone composition and structure by Fourier transform infrared spectroscopy in rat animal model**
Garip S., SEVERCAN F.
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.52, no.4, pp.580-588, 2010 (SCI-Expanded)
- LXXII. **Concentration-dependent differing actions of the nonsteroidal anti-inflammatory drug, celecoxib, in distearoyl phosphatidylcholine multilamellar vesicles**
Sade A., BANERJEE S., Severcan F.
JOURNAL OF LIPOSOME RESEARCH, vol.20, no.2, pp.168-177, 2010 (SCI-Expanded)
- LXXIII. **Low dose simvastatin induces compositional, structural and dynamic changes in rat skeletal extensor digitorum longus muscle tissue**
Ozek N. S., Sara Y., Onur R., Severcan F.
BIOSCIENCE REPORTS, vol.30, no.1, pp.41-50, 2010 (SCI-Expanded)
- LXXIV. **Characterization of microRNA-125b expression in MCF7 breast cancer cells by ATR-FTIR spectroscopy**
OZEK N. S., TUNA S., Erson-Bensan A. E., Severcan F.
ANALYST, vol.135, no.12, pp.3094-3102, 2010 (SCI-Expanded)
- LXXV. **Diabetes induces compositional, structural and functional alterations on rat skeletal soleus muscle revealed by FTIR spectroscopy: a comparative study with EDL muscle**
Bozkurt O., Severcan M., Severcan F.
ANALYST, vol.135, no.12, pp.3110-3119, 2010 (SCI-Expanded)
- LXXVI. **Evaluation and discrimination of simvastatin-induced structural alterations in proteins of different rat tissues by FTIR spectroscopy and neural network analysis**
Garip S., Yapici E., Ozek N. S., Severcan M., Severcan F.
ANALYST, vol.135, no.12, pp.3233-3241, 2010 (SCI-Expanded)
- LXXVII. **Molecular approach to the chemical characterization of fish-exuded kairomone: a Fourier transform infrared spectroscopic study**
AKKAŞ S. B., Kepenek A. O., BEKLİOĞLU M., Severcan F.
AQUATIC SCIENCES, vol.72, no.1, pp.71-83, 2010 (SCI-Expanded)
- LXXVIII. **Use of Fourier transform infrared spectroscopy for rapid comparative analysis of *Bacillus* and *Micrococcus* isolates**
Garip S., Gozen A. G., Severcan F.
FOOD CHEMISTRY, vol.113, no.4, pp.1301-1307, 2009 (SCI-Expanded)
- LXXIX. **Amifostine, a Radioprotectant Agent, Protects Rat Hepatic Microsomal Membranes Against Ionizing Radiation Induced Damage**
Cakmak G., Severcan M., Zorlu F., Severcan F.
BIOPHYSICAL JOURNAL, vol.96, no.3, 2009 (SCI-Expanded)
- LXXX. **Determination of Simvastatin Induced Variations in Sciatic Nerve by ATR-FTIR Spectroscopy**
Ozgun K., Ozek N. S., Severcan F.
BIOPHYSICAL JOURNAL, vol.96, no.3, 2009 (SCI-Expanded)
- LXXXI. **Evaluation of high hydrostatic pressure effects on bovine red blood cells and platelets**

- Ceylan C., Severcan M., Bozoglu F., Severcan F.
HIGH PRESSURE RESEARCH, vol.29, no.2, pp.358-368, 2009 (SCI-Expanded)
- LXXXII. **Effects of In-Office and At-Home Bleaching on Human Enamel and Dentin: An in Vitro Application of Fourier Transform Infrared Study**
Severcan F., Gokduman K., Dogan A., BOLAY S., Gokalp S.
APPLIED SPECTROSCOPY, vol.62, no.11, pp.1274-1279, 2008 (SCI-Expanded)
- LXXXIII. **Effects of selenium supplementation on rat heart apex and right ventricle myocardia by using FTIR spectroscopy: A cluster analysis and neural network approach**
TOYRAN AL OTAİBİ N., Severcan F., Severcan M., TURAN B.
FOOD CHEMISTRY, vol.110, no.3, pp.590-597, 2008 (SCI-Expanded)
- LXXXIV. **FTIR studies of temperature influence on the DPPG model membrane**
Severcan F., Dorohoi D.
JOURNAL OF MOLECULAR STRUCTURE, vol.887, pp.117-121, 2008 (SCI-Expanded)
- LXXXV. **Temperature influence on the dipalmitoylphosphatidylcholine - Model membranes studied by FTIR**
Korkmaz F., Severcan F., Aflori M., Dorohoi D. O.
DIGEST JOURNAL OF NANOMATERIALS AND BIOSTRUCTURES, vol.3, no.2, pp.55-61, 2008 (SCI-Expanded)
- LXXXVI. **Temperature dependence of the phospholipids bilayers stability, studied by FTIR spectroscopy**
Severcan F., Agheorghiesei C., Dorohoi D.
REVISTA DE CHIMIE, vol.59, no.3, pp.356-359, 2008 (SCI-Expanded)
- LXXXVII. **Concentration dependent different action of tamoxifen on membrane fluidity**
Kazancı N., Severcan F.
BIOSCIENCE REPORTS, vol.27, pp.247-255, 2007 (SCI-Expanded)
- LXXXVIII. **Interaction between vitamin D-2 and magnesium in liposomes: Differential scanning calorimetry and FTIR spectroscopy studies**
Toyran N., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.839, pp.19-27, 2007 (SCI-Expanded)
- LXXXIX. **Melatonin affects the order, dynamics and hydration of brain membrane lipids**
Akkas S. B., Inci S., Zorlu F., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.834, pp.207-215, 2007 (SCI-Expanded)
- XC. **Melatonin induces opposite effects on order and dynamics of anionic DPPG model membranes**
Sahin I., Severcan F., Kazancı N.
JOURNAL OF MOLECULAR STRUCTURE, vol.834, pp.195-201, 2007 (SCI-Expanded)
- XCI. **The characterization and differentiation of higher plants by Fourier transform infrared spectroscopy**
Gorgulu S. T., Dogan M., Severcan F.
APPLIED SPECTROSCOPY, vol.61, no.3, pp.300-308, 2007 (SCI-Expanded)
- XCII. **Selenium alters the lipid content and protein profile of rat heart: An FTIR micro spectroscopic study**
Toyran N., Turan B., Severcan F.
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.458, no.2, pp.184-193, 2007 (SCI-Expanded)
- XCIII. **Evaluation of disseminated candidiasis on an experimental animal model: A Fourier transform infrared study**
Dogan A., Ergen K., Budak F., Severcan F.
APPLIED SPECTROSCOPY, vol.61, no.2, pp.199-203, 2007 (SCI-Expanded)
- XCIV. **Differentiation of mesophilic and thermophilic bacteria with Fourier transform infrared spectroscopy**
Garip S., Bozoglu F., Severcan F.
APPLIED SPECTROSCOPY, vol.61, no.2, pp.186-192, 2007 (SCI-Expanded)
- XCV. **Spectroscopy of biological nanocrystals**
Ortac I., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.21, no.1, pp.31-41, 2007 (SCI-Expanded)
- XCVI. **FTIR spectroscopic characterization of irradiated hazelnut (*Corylus avellana* L.)**

- Dogan A., Siyakus G., Severcan F.
FOOD CHEMISTRY, vol.100, no.3, pp.1106-1114, 2007 (SCI-Expanded)
- XCVII. **Investigation of diabetes-induced effect on apex of rat heart myocardium by using cluster analysis and neural network approach: An FTIR study**
TOYRAN AL OTAİBİ N., Severcan F., Severcan M., TURAN B.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.21, pp.269-278, 2007 (SCI-Expanded)
- XCVIII. **The effect of diabetes mellitus on rat skeletal extensor digitorum longus muscle tissue: An FTIR study**
Bozkurt O., Bilgin M. D., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.21, no.3, pp.151-160, 2007 (SCI-Expanded)
- XCIX. **Effects of lipoic acid supplementation on rat brain tissue: An FTIR spectroscopic and neural network study**
Akkas S. B., Severcan M., Yilmaz O., Severcan F.
FOOD CHEMISTRY, vol.105, no.3, pp.1281-1288, 2007 (SCI-Expanded)
- C. **Early alterations in myocardia and vessels of the diabetic rat heart: an FTIR microspectroscopic study**
Toyran N., Lasch P., Naumann D., Turan B., Severcan F.
BIOCHEMICAL JOURNAL, vol.397, pp.427-436, 2006 (SCI-Expanded)
- CI. **17 beta-estradiol induced compositional, structural and functional changes in rainbow trout liver, revealed by FT-IR spectroscopy: A comparative study with nonylphenol**
Cakmak G., Togan I., Severcan F.
AQUATIC TOXICOLOGY, vol.77, no.1, pp.53-63, 2006 (SCI-Expanded)
- CII. **Effects of Commercial Formula Feeding in a Fasting Animal Model: A Fourier Transform Infrared Spectroscopic Study**
Dogan A., Tuzlaci A., Guvenc B., SEVERCAN F.
MOLECULAR BIOLOGY OF THE CELL, vol.17, 2006 (SCI-Expanded)
- CIII. **The Effect of Antifungal Drug Caspofungin on Disseminated Candidiasis: An FTIR Study**
Dogan A., Ergen K., KEÇELİ ÖZCAN S. A., SEVERCAN F.
MOLECULAR BIOLOGY OF THE CELL, vol.17, 2006 (SCI-Expanded)
- CIV. **Effect of gramicidin S on the dipalmitoylphosphatidyl-glycerol thermotropic phase transition in DPPG/GS systems: A mathematical approach**
Stan C., Cristescu C. P., Severcan F., Dorohoi D.
MOLECULAR CRYSTALS AND LIQUID CRYSTALS, vol.457, pp.27-41, 2006 (SCI-Expanded)
- CV. **Effect of stereotactic radiosurgery on lipids and proteins of normal and hypoperfused rat brain homogenates: A Fourier transform infrared spectroscopy study**
Toyran N., Zorlu F., Severcan F.
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.81, no.12, pp.911-918, 2005 (SCI-Expanded)
- CVI. **Effect of progesterone on DPPC membrane: Evidence for lateral phase separation and inverse action in lipid dynamics**
Korkmaz F., Severcan F.
ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol.440, no.2, pp.141-147, 2005 (SCI-Expanded)
- CVII. **FTIR study of biodegradable biopolymers: P(3HB), P(3HB-co-4HB) and P(3HB-co-3HV)**
Bayari S., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.744, pp.529-534, 2005 (SCI-Expanded)
- CVIII. **Rapid monitoring of diabetes-induced lipid peroxidation by Fourier transform infrared spectroscopy: Evidence from rat liver microsomal membranes**
Severcan F., Gorgulu G., Gorgulu S., Guray T.
ANALYTICAL BIOCHEMISTRY, vol.339, no.1, pp.36-40, 2005 (SCI-Expanded)
- CIX. **Melatonin strongly interacts with zwitterionic model membranes - evidence from Fourier transform infrared spectroscopy and differential scanning calorimetry**
Severcan F., Sahin I., Kazancı N.

- BIOCHIMICA ET BIOPHYSICA ACTA-BIOMEMBRANES, vol.1668, no.2, pp.215-222, 2005 (SCI-Expanded)
- CX. Concentration dependent different action of progesterone on the order, dynamics and hydration states of the head group of dipalmitoyl-phosphatidylcholine membrane
Korkmaz F., Kirbiyik H., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.19, no.4, pp.213-219, 2005 (SCI-Expanded)
- CXI. Chronic hypoperfusion alters the content and structure of proteins and lipids of rat brain homogenates: a Fourier transform infrared spectroscopy study
Toyran N., Zorlu F., Donmez G., Oge K., Severcan F.
EUROPEAN BIOPHYSICS JOURNAL WITH BIOPHYSICS LETTERS, vol.33, no.6, pp.549-554, 2004 (SCI-Expanded)
- CXII. Using artificially generated spectral data to improve protein secondary structure prediction from Fourier transform infrared spectra of proteins
Severcan M., Haris P., Severcan F.
ANALYTICAL BIOCHEMISTRY, vol.332, no.2, pp.238-244, 2004 (SCI-Expanded)
- CXIII. The influence of gramicidin S on the thermotropic phase transition of dipalmitoylphosphatidylglycerol DPPG/GS systems: Experiment and computer model
Stan C., Cristescu C., Severcan F., Dorohoi D.
REVUE ROUMAINE DE CHIMIE, vol.49, no.9, pp.777-782, 2004 (SCI-Expanded)
- CXIV. Standardless PIXE analysis of thick biomineral structures
Preoteasa E., Georgescu R., Ciortea C., Fluerasu D., Harangus L., Iordan A., Severcan F., Boyar H., Preoteasa E., Piticu I., et al.
ANALYTICAL AND BIOANALYTICAL CHEMISTRY, vol.379, pp.825-841, 2004 (SCI-Expanded)
- CXV. The effects of chronic hypoperfusion on rat cranial bone mineral and organic matrix - A Fourier transform infrared spectroscopy study
Boyar H., Zorlu F., Mut M., Severcan F.
ANALYTICAL AND BIOANALYTICAL CHEMISTRY, vol.379, no.3, pp.433-438, 2004 (SCI-Expanded)
- CXVI. Fourier transform infrared spectroscopy suggests unfolding of loop structures precedes complete unfolding of pig citrate synthase
Severcan F., Haris P.
BIOPOLYMERS, vol.69, no.4, pp.440-447, 2003 (SCI-Expanded)
- CXVII. FT-IR spectroscopic analysis of rainbow trout liver exposed to nonylphenol
Cakmak G., Togan I., Uguz C., Severcan F.
APPLIED SPECTROSCOPY, vol.57, no.7, pp.835-841, 2003 (SCI-Expanded)
- CXVIII. Competitive effect of vitamin D-2 and Ca²⁺ on phospholipid model membranes: an FTIR study
Toyran N., Severcan F.
CHEMISTRY AND PHYSICS OF LIPIDS, vol.123, no.2, pp.165-176, 2003 (SCI-Expanded)
- CXIX. FTIR spectroscopic investigation of mineral structure of streptozotocin induced diabetic rat femur and tibia
Boyar H., Turan B., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.17, pp.627-633, 2003 (SCI-Expanded)
- CXX. Fourier transform infrared spectroscopic studies of diabetic rat heart crude membranes
Severcan F., Kaptan N., Turan B.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.17, pp.569-577, 2003 (SCI-Expanded)
- CXXI. Infrared spectroscopic studies on the dipalmitoyl phosphatidylcholine bilayer interactions with calcium phosphate: Effect of vitamin D-2
Toyran N., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.16, pp.399-408, 2002 (SCI-Expanded)
- CXXII. Estimation of protein secondary structure from FTIR spectra using neural networks
Severcan M., Severcan F., Haris P.
JOURNAL OF MOLECULAR STRUCTURE, vol.565, pp.383-387, 2001 (SCI-Expanded)
- CXXIII. Thermodynamics study of gramicidin S and dipalmitoylphosphatidylcholine model membrane interactions based on the FTIR spectroscopy

- AKINOĞLU B. G., Gheith M., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.565, pp.281-285, 2001 (SCI-Expanded)
- CXXIV. **Vitamin D-2 at high and low concentrations exert opposing effects on molecular order and dynamics of dipalmitoyl phosphatidylcholine membranes**
Kazancı N., Toyran N., Haris P., Severcan F.
SPECTROSCOPY-AN INTERNATIONAL JOURNAL, vol.15, no.2, pp.47-55, 2001 (SCI-Expanded)
- CXXV. **Vitamin D-2 modulates melittin-membrane interactions**
Severcan F., Durmus H., Eker F., AKINOĞLU B. G., Haris P.
TALANTA, vol.53, no.1, pp.205-211, 2000 (SCI-Expanded)
- CXXVI. **Fourier transform infrared study of the effect of diabetes on rat liver and heart tissues in the C-H region**
Severcan F., Toyran N., Kaptan N., Turan B.
TALANTA, vol.53, no.1, pp.55-59, 2000 (SCI-Expanded)
- CXXVII. **The effect of magnesium ions on vitamin D-2-phospholipid model membrane interactions in the presence of different buffer media**
Toyran N., Severcan F.
TALANTA, vol.53, no.1, pp.23-27, 2000 (SCI-Expanded)
- CXXVIII. **A biomechanical and spectroscopic study of bone from rats with selenium deficiency and toxicity**
Turan B., Bayari S., Balçık C., Severcan F., Akkas N.
BIOMETALS, vol.13, no.2, pp.113-121, 2000 (SCI-Expanded)
- CXXIX. **Tamoxifen increases membrane fluidity at high concentrations**
Severcan F., Kazancı N., Zorlu F.
BIOSCIENCE REPORTS, vol.20, no.3, pp.177-184, 2000 (SCI-Expanded)
- CXXX. **FTIR spectroscopic characterization of protein structure in aqueous and non-aqueous media**
Haris P., Severcan F.
JOURNAL OF MOLECULAR CATALYSIS B-ENZYMATIC, vol.7, pp.207-221, 1999 (SCI-Expanded)
- CXXXI. **Application of turbidity technique on peptide-lipid and drug-lipid interactions**
Eker F., Durmus H., AKINOĞLU B. G., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.482, pp.693-697, 1999 (SCI-Expanded)
- CXXXII. **FTIR and turbidity studies of fish oil-dipalmitoylphosphatidylcholine model membrane interactions**
Severcan F., Bayari S., Karahan D.
JOURNAL OF MOLECULAR STRUCTURE, vol.481, pp.413-416, 1999 (SCI-Expanded)
- CXXXIII. **Effect of pregnancy on fluidity of parotid saliva: An electron spin resonance study**
Severcan F., Gokalp S.
JOURNAL OF DENTAL RESEARCH, vol.77, pp.779, 1998 (SCI-Expanded)
- CXXXIV. **Oestrogen phospholipid membrane interactions: An FTIR study**
Boyar H., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.408, pp.269-272, 1997 (SCI-Expanded)
- CXXXV. **Investigation of the fluidity of biological fluids with a PDDTB spin probe**
Severcan F., Acar B., Gokalp S.
JOURNAL OF MOLECULAR STRUCTURE, vol.408, pp.279-281, 1997 (SCI-Expanded)
- CXXXVI. **Tamoxifen-model membrane interactions: An FT-IR study**
Boyar H., Severcan F.
JOURNAL OF MOLECULAR STRUCTURE, vol.408, pp.265-268, 1997 (SCI-Expanded)
- CXXXVII. **Vitamin E decreases the order of the phospholipid model membranes in the gel phase: An FTIR study**
Severcan F.
BIOSCIENCE REPORTS, vol.17, no.2, pp.231-235, 1997 (SCI-Expanded)
- CXXXVIII. **FTIR studies of vitamin E-cholesterol-DPPC membrane interactions in CH₂ region**
Severcan F., Baykal U., Suzer S.
FRESENIUS JOURNAL OF ANALYTICAL CHEMISTRY, vol.355, pp.415-417, 1996 (SCI-Expanded)

Articles Published in Other Journals

- I. **Investigation of neurodegenerative diseases from body fluid samples using Fourier transform infrared spectroscopy**
Sevinc A., Yonar D., Sevencan F.
BIOMEDICAL SPECTROSCOPY AND IMAGING, vol.4, no.4, pp.341-357, 2015 (ESCI)

Books & Book Chapters

- I. **Methodological approaches from experimental to computational analysis in vibrational spectroscopy and microspectroscopy**
SEVERCAN F., AKKAŞ S. B., TÜRKER S., Yücel R.
in: Vibrational Spectroscopy in Diagnosis and Screening, F. Severcan, P.I. Haris , Editor, IOS Press , pp.12-52, 2012
- II. **Diagnosis and screening of aquatic environments by vibrational spectroscopy**
AKKAŞ S. B., SEVERCAN F.
in: Vibrational Spectroscopy in Diagnosis and Screening, F. Severcan, P.I. Haris, Editor, IOS Press , pp.321-349, 2012

Refereed Congress / Symposium Publications in Proceedings

- I. **Infrared Spectroscopy Offers Tremendous Potential in Cancer Diagnosis**
Sevencan F., Abbas S., Yonar D., Emri S.
63rd Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 2 - 06 March 2019, vol.116
- II. **DNA Methylation Patterns of Cadmium, Lead and Silver Tolerant Bacteria Isolated from the Surface Mucus of Freshwater Fish**
GURBANOV R., TUNÇER S., GÖZEN A. G., SEVERCAN F.
ISEEP-2017 VIII. INTERNATIONAL SYMPOSIUM ONECOLOGY AND ENVIRONMENTAL PROBLEMS, Çanakkale, Turkey, 4 - 07 October 2017, pp.96
- III. **Thermal Study of Heavy Metal-Tolerant Gordonia, Acinetobacter and Microbacterium Species for Investigation of Bioremediation**
GURBANOV R., GÖZEN A. G., SEVERCAN F.
ISEEP-2017 VIII. INTERNATIONAL SYMPOSIUM ONECOLOGY AND ENVIRONMENTAL PROBLEMS, Çanakkale, Turkey, 4 - 07 October 2017, pp.301
- IV. **Possible Therapeutic Effects of Gamma-Tocotrienol Conjugation Therapy with Doxorubicin on Hepatocellular Carcinoma Cell Line HEPG2**
Sevinc A., Ozyurt I., Sevencan F. Z.
58th Annual Meeting of the Biophysical-Society, San-Francisco, Costa Rica, 15 - 19 February 2014, vol.112
- V. **IR coupled chemometrics in environmental industrial and forensic studies**
GURBANOV R., GÖZEN A. G., SEVERCAN F.
The 2nd International Congress of Forensic Toxicology- Industrial and Environmental Toxicology, Ankara, Turkey, 26 - 30 May 2016
- VI. **Monitoring of Tryptophan as a Biomarker for Cancerous Cells in Terahertz (THz) Sensing**
ALTAN H., Ozek N. S., Gok S., Ozyurt I., Sevencan F.
Conference on Optical Biopsy XIV - Toward Real-Time Spectroscopic Imaging and Diagnosis, San-Francisco, Costa Rica, 15 - 17 February 2016, vol.9703
- VII. **IR coupled pattern recognition techniques for the classification of toxic metal tolerant bacteria**
GURBANOV R., ŞİMŞEK ÖZEK N., GÖZEN A. G., SEVERCAN F.
MBD2015 - IV. International Congress of the Molecular Biology Association of Turkey, Ankara, Turkey, 27 - 29 November 2015, pp.189

- VIII. **Detection of Silver Associated Gross Molecular Changes in Acinetobacter**
ÖZAKTAŞ T., GÖZEN A. G., SEVERCAN F.
115th General Meeting of the American Society for Microbiology (ASM2015), New Orleans, United States Of America, 30 May - 02 June 2015, pp.192
- IX. **An ATR FTIR Spectroscopic Approach to Elucidate Biochemical Mechanisms in Heavy Metal Resistant Escherichia coli**
GURBANOV R., ŞİMŞEK ÖZEK N., GÖZEN A. G., SEVERCAN F.
115th General Meeting of the American Society for Microbiology (ASM2015), NEW ORLEANS, United States Of America, 30 May - 02 June 2015, pp.136
- X. **Investigation of Gender Effect on Obesity using a Model of Inbreed Obese Mouse Lines by Fourier Transform Infrared Imaging**
Baloglu F. K., Brockmann G., Heise S., Garip S., Severcan F.
59th Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 7 - 11 February 2015, vol.108
- XI. **The Effect of Selenium Treatment On-Diabetic-Induced Structural Variations in the Molecules of Rat Kidney Plasma Membrane**
Gurbanov R., Abbas S., Bilgin M., Severcan F.
59th Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 7 - 11 February 2015, vol.108
- XII. **A Novel Method for Early Diagnosis of Malignant Pleural Mesothelioma from Human Serum Samples: ATR-FTIR Spectroscopy**
Yonar D., SANDAL A., Emri S., Severcan F.
59th Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 7 - 11 February 2015, vol.108
- XIII. **Fourier Transform Infrared Spectroscopy and Imaging in Cancer Diagnosis and Characterization**
Severcan F., Ozek N. S., Gok S.
59th Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 7 - 11 February 2015, vol.108
- XIV. **The comparison of macromolecular changes in different acinetobacter isolates upon neomycin exposure**
Kanat T., GÖZEN A. G., Severcan F.
FEBS EMBO 2014 Conference, Paris, France, 30 August - 04 September 2014, vol.281, pp.671
- XV. **A Novel Approach to Aquatic Ecotoxicology Applications of FTIR Spectroscopy**
AKKAŞ S. B., ÇAKMAK G., BEKLİOĞLU YERLİ M., SEVERCAN F.
FT-IR Meeting in Berlin 2013: FT-IR Spectroscopy in Microbiological and Medical Diagnostics, 24 - 25 October 2013
- XVI. **Effects of Simvastatin on the structure and function of kidney brush border membrane macromolecules**
Gocmen S. U., Ozek N. S., Severcan M., Severcan F.
9th European-Biophysical-Societies-Association Congress, Lisbon, Portugal, 13 - 17 July 2013, vol.42
- XVII. **Characterization of simvastatin-induced structural and functional alterations in the molecules of kidney brush border membrane by ATR-FTIR spectroscopy and chemometric approaches**
Severcan F., Gocmen S. U., Ozek N. S., Severcan M.
Joint Annual Meeting of the ASPET/BPS at Experimental Biology (EB), Massachusetts, United States Of America, 20 - 24 April 2013, vol.27
- XVIII. **FTIR microspectroscopic analysis of sodium butyrate induced differentiation in colon cancer cells in a time-dependent manner**
Ozek N. S., Gok S., BANERJEE S., Severcan F.
Joint Annual Meeting of the ASPET/BPS at Experimental Biology (EB), Massachusetts, United States Of America, 20 - 24 April 2013, vol.27
- XIX. **Epileptic Seizures-Induced Structural Changes in Rat Spine Bone Tissues: FTIR Microspectroscopic and Chemometric Study**
Garip S., ŞAHİN D., Severcan M., SEVERCAN F.
57th Annual Meeting of the Biophysical-Society, Pennsylvania, United States Of America, 2 - 06 February 2013, vol.104

- XX. **Characterization of Sodium Butyrate Induced Differentiation in Colon Cancer Cells by Fourier Transform Infrared Spectroscopy and Microscopy**
Ozek N. S., Sade A., BANERJEE S., Severcan F.
57th Annual Meeting of the Biophysical-Society, Pennsylvania, United States Of America, 2 - 06 February 2013,
vol.104
- XXI. **Application of FTIR Imaging on Healthy (Donor Age Effect) and Disease (Beta Thalassemia Major) States**
Aksoy C., Uckan D., SEVERCAN F.
57th Annual Meeting of the Biophysical-Society, Pennsylvania, United States Of America, 2 - 06 February 2013,
vol.104
- XXII. **Phylogenetic differentiation of Aegilops and Triticum species by using ATR-FTIR spectroscopy**
Demir P., ÖNDE S., Ozgen M., AVCI BİRSİN M., SEVERCAN F.
Eurobiotech Agriculture Symposium, Kayseri, Turkey, 12 - 14 April 2012, vol.161, pp.32
- XXIII. **Toward a protein profile of the zooplankton Daphnia pulex exposed to the pesticide cypermethrin using ATR FTIR spectroscopy as a novel method**
AKKAŞ S. B., Severcan M., BEKLİOĞLU YERLİ M., SEVERCAN F.
12th International Congress on Amino Acids, Peptides and Proteins (ICAAP 2011), 1 - 05 August 2011
- XXIV. **The side-effects of convulsive epileptic seizures and Carbamazepine therapy on bone tissues of genetically-induced epileptic rats: An FTIR imaging and biomechanical study**
Garip S., EVİS Z., İLBAY G., Boskey A. L., Severcan F.
Experimental Biology Meeting 2011, Washington, Kiribati, 9 - 13 April 2011, vol.25
- XXV. **Characterization and Differentiation of Protein Structural Changes in Type I-Diabetic Rat Testis Tissues and the Role of Vitamin C on Recovery: An FTIR Spectroscopic and Neural Network Study**
Severcan F., Guldag D., Severcan M.
Experimental Biology Meeting 2011, Washington, Kiribati, 9 - 13 April 2011, vol.25
- XXVI. **The Structural Investigation of Protective Role of Antiepileptic Vigabatrin in Epilepsy Treatment by FTIR Spectroscopy and Neural Networks**
Turker S., Severcan M., KOMSUOĞLU S., Severcan F.
Annual Meeting of the American-Society-for-Cell-Biology (ASCB), Colorado, United States Of America, 3 - 07 December 2011, vol.22
- XXVII. **Monitoring of Radioprotective Effects of Amifostine on Rat Liver Microsomal Membrane and Brain Tissue Lipids by FTIR Spectroscopy and Microspectroscopy.**
Cakmak G., Miller L. M., Severcan M., Zorlu F., Severcan F.
Annual Meeting of the American-Society-for-Cell-Biology (ASCB), Colorado, United States Of America, 3 - 07 December 2011, vol.22
- XXVIII. **Applications of FTIR spectroscopy in aquatic sciences**
AKKAŞ S. B., ÇAKMAK G., SEVERCAN F.
International Conference on Recent Frontiers in Applied Spectroscopy (ICORFAS-2010), 22 - 24 September 2010
- XXIX. **Tuzluluğun ve balık avlanması baskısının Daphnia pulex in hayatı kalma oranı ve yaşam döngüsü parametreleri üzerindeki etkileri**
Bezirci G., AKKAŞ S. B., YILDIRIM F., SEVERCAN F., BEKLİOĞLU YERLİ M.
III. Ulusal Limnoloji Sempozyumu, Turkey, 27 - 29 August 2008
- XXX. **Molecular investigation of the effect of diabetes on skeletal muscle: An FTIR study**
Bozkurt O., Bilgin M. D., Severcan M., Severcan F.
51st Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 3 - 07 March 2007
- XXXI. **Interactions of cholesterol reducing agent simvastatin with neutral DPPC and DMPC multilamellar liposomes**
Kocak M., Severcan F.
51st Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 3 - 07 March 2007
- XXXII. **The investigation of the possible effects of cholesterol reducing agent simvastatin on rat testis tissue**
Ozek N. S., Sara Y., Onur R., Yilmaz O., Severcan F.

- 51st Annual Meeting of the Biophysical-Society, Maryland, United States Of America, 3 - 07 March 2007
- XXXIII. Interaction of picrotoxin with DPPC model membrane**
Gorgulu S. T., Severcan F., Wassall S., Stillwell W.
60th Annual Meeting of the American-Epilepsy-Society, California, United States Of America, 1 - 05 December 2006,
vol.47, pp.236
- XXXIV. The investigation of early molecular consequences of chemically induced epileptic activity**
Gorgulu S. T., Kara N., Gunes Z., Ates N., Ilbay G., Severcan F.
60th Annual Meeting of the American-Epilepsy-Society, California, United States Of America, 1 - 05 December 2006,
vol.47, pp.234
- XXXV. Impact of pesticide and fish kairomone on the life history traits of Daphnia using molecular and ecological approaches**
AKKAŞ S. B., BEKLİOĞLU YERLİ M., SEVERCAN F.
VII. International Symposium on Cladocera (Cladocera-2005), 3 - 09 September 2005
- XXXVI. The role of selenium treatment on diabetes-induced changes in rat heart at the molecular level**
Toyran N., Turan B., Severcan F.
25th Annual Scientific Session of the European Section of the International-Society-for-Heart-Research, Tromso,
Norway, 21 - 25 June 2005, vol.38, pp.1066
- XXXVII. An FTIR investigation of the effect of radiation and the possible protective effect of melatonin on rat brain crude membrane**
Akkas S., Kok F., Demircioglu F., Inci S., Zorlu F., Severcan F.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XXXVIII. Effect of STZ-induced diabetes on rat skeletal muscles: An FTIR study**
Erar H., Akkas B., Gorgulu S., Severcan F.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XXXIX. FTIR spectroscopic characterization of bleaching agents on human teeth**
Dogan A., Gokduman K., Bolay S., Gokalp S., Severcan F.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XL. Protein secondary structure prediction of STZ-induced diabetic and antioxidant treated diabetic rat kidney microsomal membranes by neural networks**
Severcan M., Gorgulu G., Severcan F.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XLI. The effect of lipoic acid and vitamin E on rat brain: An FTIR spectroscopic approach**
Akkas S., Yilmaz O., Severcan F.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XLII. Antiepileptic agent vigabatrin - Model membrane interaction**
Gorgulu S., Deniz O., Komsuoglu S., Severcan F.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XLIII. FTIR spectroscopic analysis of rainbow trout liver exposed to 17 beta-estradiol**
Severcan F., Togan I., Cakmak G.
49th Annual Meeting of the Biophysical-Society, California, United States Of America, 12 - 16 February 2005, vol.88
- XLIV. An FTIR investigation of the effects of melatonin on rat brain crude membrane**
Akkas S., Zorlu F., Severcan F.
48th Annual Meeting of the Biophysical Society, Maryland, United States Of America, 14 - 18 February 2004, vol.86
- XLV. Interaction of melatonin with zwitterionic model membranes**
Severcan F., Sahin I., Kazancı N.
48th Annual Meeting of the Biophysical Society, Maryland, United States Of America, 14 - 18 February 2004, vol.86
- XLVI. Balık sinyalinin Fourier Transform Infrared spektroskopi teknigi ile araştırılması**
AKKAŞ S. B., TÜRKER S., Zorlu P., BEKLİOĞLU YERLİ M., SEVERCAN F.
XVI. Ulusal Biyoloji Kongresi, Turkey, 4 - 07 September 2002

Supported Projects

SEVERCAN F., ESENTÜRK O., ALTAN H., ÖZER Z., ŞİMŞEK ÖZEK N., Project Supported by Higher Education Institutions, İnsan Kolon Adenokarsinoma Hücrelerinde Sodyum Büтирat Konsantrasyonuna Bağlı Oluşan Yapısal ve İçeriksel Farklılaşmaların Raman, FTIR ve Terahertz Spektroskopisi Yöntemleriyle Araştırılması, 2013 - Continues

SEVERCAN F., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

SEVERCAN F., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015

SEVERCAN F., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2014

SEVERCAN F., ABBAS S., Project Supported by Higher Education Institutions, PROTEİN YAPI VE STABİLİTESİNİN ÇÖZELTİ VE BİYOLOJİK SİSTEMLERDE BİYOFİZİKSEL İNCELENMESİ, 2013 - 2013

SEVERCAN F., Ergün S., Project Supported by Higher Education Institutions, ESSİTALOPRAM'IN SPİNGOMYELİN MODEL MEMBRANLARI İLE ETKİLEŞMESİNİN YAPISAL VE İŞLEVSEL AÇIDAN BİYOFİZİKSEL YÖNTEMLERLE ARAŞTIRILMASI, 2013 - 2013

SEVERCAN F., GALİOĞLU F. E., Project Supported by Higher Education Institutions, SİÇANLARDA SİSTEMİK İNFLAMASYONUN NEDEN OLDUĞU NÖRONAL MOLEKÜLER KOMPOZİSYON DEĞİŞİKLİKLERİİN FOURIER TRANSFORM INFRARED MİKROSPEKTROSKOPİSİ (FTIRM) YÖNTEMİYLE KARAKTERİZASYONU, 2013 - 2013

SEVERCAN F., Project Supported by Higher Education Institutions, Psikiyatrik Rahatsızlıklarda Kullanılanvaldoxan'ın Etken Maddesi Olan Agomelati'nin Model Beyin Membranı İle Etkileşmesi, 2012 - 2012

SEVERCAN F., Project Supported by Higher Education Institutions, Kolon Kanseri Hücre Farklılaşmasının Titreşim Spektroskopisi Yöntemleri İle Moleküler Düzeyde İncelenmesi, 2012 - 2012

SEVERCAN F., Project Supported by Higher Education Institutions, Antidepresan İlaç-Membran Etkileşmesinin Yapısal Ve İşlevsel Açıdan İncelenmesi, 2010 - 2011

SEVERCAN F., Project Supported by Higher Education Institutions, Diyabetin Sıçan Böbrek Hücre Membranı Üzerindeki Etkilerinin Ve Selenyumun Tedavi Edici Rolünün Araştırılması, 2009 - 2011

SEVERCAN F., Project Supported by Higher Education Institutions, Diyabetin Böbrek Dokusu Üzerindeki Etkilerinin Moleküler Düzeyde İncelenmesi Ve C Vitamininin Tedavi Edici Rolünün Araştırılması, 2010 - 2010

SEVERCAN F., ŞİMŞEK ÖZEK N., Project Supported by Higher Education Institutions, Uzun Süreli Karbamazepit Terapisinin Sağlıklı Sıçan Kemik Dokularındaki Yan Etkilerinin Moleküler Düzeyde İncelenmesi, 2010 - 2010

Metrics

Publication: 187

Citation (WoS): 4237

Citation (Scopus): 3725

H-Index (WoS): 35

H-Index (Scopus): 33