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Personal Information

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Education Information

Doctorate, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (Dr), Turkey 2006 - 2011

Post Graduate, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (YI) (Tezli), Turkey 2003 - 2006

Under Graduate, Middle East Technical University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 1997 - 2002

Dissertations

Doctorate, GSM-EDGE modülasyonlu radyo frekans alanların hepatosellüler karsinom hücrelerine etkileri, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (Dr), 2011

Post Graduate, Cep telefonu radyasyonunun farklı frekans-şiddetteki ses ile değişimi ve doku hidroksiprolin seviyesine etkisi, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (YI) (Tezli), 2005

Research Areas

Biophysics, Neurophysiology, Biological Spectroscopy, Cell Membrane and Liposomes, Molecular Biophysics, Neurobiophysics, Radiation Biophysics

Academic Titles / Tasks

Associate Professor, Gazi University, Tıp Fakültesi, Temel Tıp Bilimleri, 2017 - Continues

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

- I. **The 2100 MHz radiofrequency radiation of a 3G-mobile phone and the DNA oxidative damage in brain**
Sahin D., ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., TOMRUK A., ÜNLÜ İ., SEPİCİ DİNÇEL A., Seyhan N.
JOURNAL OF CHEMICAL NEUROANATOMY, vol.75, pp.94-98, 2016 (Journal Indexed in SCI)
- II. **Neurodegenerative changes and apoptosis induced by intrauterine and extrauterine exposure of radiofrequency radiation**
GÜLER ÖZTÜRK G., ÖZGÜR BÜYÜKATALAY E., KELEŞ H., TOMRUK A., VURAL S., Seyhan N.
JOURNAL OF CHEMICAL NEUROANATOMY, vol.75, pp.128-133, 2016 (Journal Indexed in SCI)
- III. **The effects of 2100-MHz radiofrequency radiation on nasal mucosa and mucociliary clearance in rats**
Aydoğan F., Aydın E., Koca G., ÖZGÜR BÜYÜKATALAY E., ATILLA P., Tuzuner A., Demirci S., TOMRUK A., Ozturk G. G., Seyhan N., et al.
INTERNATIONAL FORUM OF ALLERGY & RHINOLOGY, vol.5, no.7, pp.626-632, 2015 (Journal Indexed in SCI)
- IV. **The effects of N-acetylcysteine and epigallocatechin-3-gallate on liver tissue protein oxidation and**

antioxidant enzyme levels after the exposure to radiofrequency radiation

ÖZGÜR BÜYÜKATALAY E., Sahin D., TOMRUK A., GÜLER ÖZTÜRK G., SEPİCİ DİNÇEL A., Altan N., Seyhan N.
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.91, no.2, pp.187-193, 2015 (Journal Indexed in SCI)

- V. **The effect of 2100 MHz radiofrequency radiation of a 3G mobile phone on the parotid gland of rats**
Aydoğan F., ÜNLÜ İ., Aydın E., YUMUŞAK N., DEVRİM E., Samim E. E., ÖZGÜR BÜYÜKATALAY E., Unsal V., TOMRUK A., Ozturk G. G., et al.
AMERICAN JOURNAL OF OTOLARYNGOLOGY, vol.36, no.1, pp.39-46, 2015 (Journal Indexed in SCI)
- VI. **Mobile Phone Radiation Alters Proliferation of Hepatocarcinoma Cells**
ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., KISMALI G., Seyhan N.
CELL BIOCHEMISTRY AND BIOPHYSICS, vol.70, no.2, pp.983-991, 2014 (Journal Indexed in SCI)
- VII. **Effects of Prenatal and Postnatal Exposure to GSM-Like Radiofrequency on Blood Chemistry and Oxidative Stress in Infant Rabbits, an Experimental Study**
ÖZGÜR BÜYÜKATALAY E., KISMALI G., GÜLER ÖZTÜRK G., Akcay A., Ozkurt G., SEL T., Seyhan N.
CELL BIOCHEMISTRY AND BIOPHYSICS, vol.67, no.2, pp.743-751, 2013 (Journal Indexed in SCI)
- VIII. **The influence of 1800 MHz GSM-like signals on blood chemistry and oxidative stress in non-pregnant and pregnant rabbits**
KISMALI G., ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., Akcay A., SEL T., Seyhan N.
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.88, no.5, pp.414-419, 2012 (Journal Indexed in SCI)
- IX. **The effect of radiofrequency radiation on DNA and lipid damage in female and male infant rabbits**
GÜLER ÖZTÜRK G., TOMRUK A., ÖZGÜR BÜYÜKATALAY E., Sahin D., SEPİCİ DİNÇEL A., Altan N., Seyhan N.
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.88, no.4, pp.367-373, 2012 (Journal Indexed in SCI)
- X. **Mutagenic and morphologic impacts of 1.8 GHz radiofrequency radiation on human peripheral blood lymphocytes (hPBLs) and possible protective role of pre-treatment with Ginkgo biloba (EGb 761)**
EŞMEKAYA M. A., Aytakin E., ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., ERGÜN M. A., ÖMEROĞLU S., Seyhan N.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.410, pp.59-64, 2011 (Journal Indexed in SCI)
- XI. **APOPTOSIS RESULTED FROM RADIOFREQUENCY RADIATION EXPOSURE OF PREGNANT RABBITS AND THEIR INFANTS**
GÜLER ÖZTÜRK G., ÖZGÜR BÜYÜKATALAY E., KELEŞ H., TOMRUK A., VURAL S., Seyhan N.
BULLETIN OF THE VETERINARY INSTITUTE IN PULAWY, vol.55, no.1, pp.127-134, 2011 (Journal Indexed in SCI)
- XII. **Protein oxidation under extremely low frequency electric field in guinea pigs. Effect of N-acetyl-L-cysteine treatment**
GÜLER ÖZTÜRK G., Turkozer Z., ÖZGÜR BÜYÜKATALAY E., TOMRUK A., Seyhan N., KARASU Ç.
GENERAL PHYSIOLOGY AND BIOPHYSICS, vol.28, no.1, pp.47-55, 2009 (Journal Indexed in SCI)
- XIII. **Antioxidants alleviate electric field-induced effects on lung tissue based on assays of heme oxygenase-1, protein carbonyl content, malondialdehyde, nitric oxide, and hydroxyproline**
Gueler G., Tuerkoezer Z., ÖZGÜR BÜYÜKATALAY E., Seyhan N.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.407, no.4, pp.1326-1332, 2009 (Journal Indexed in SCI)
- XIV. **The Evaluation of Epigallocatechin Gallate and N-Acetylcysteine on Serum Testosterone Levels in Male Guinea Pigs Expose to Cell Phone Microwave**
KISMALI G., ÖZGÜR BÜYÜKATALAY E., Sayiner S., Alpaslan B., GÜLER ÖZTÜRK G., Seyhan N., SEL T.
JOURNAL OF ANIMAL AND VETERINARY ADVANCES, vol.8, no.6, pp.1149-1151, 2009 (Journal Indexed in SCI)
- XV. **The Effects of Epigallocatechin Gallate and N-Acetylcysteine on Mobile Phone-Induced Oxidative Stress in Guinea Pigs**
KISMALI G., ÖZGÜR BÜYÜKATALAY E., Sayiner S., Alpaslan B., GÜLER ÖZTÜRK G., Seyhan N., SEL T.
JOURNAL OF ANIMAL AND VETERINARY ADVANCES, vol.8, no.5, pp.959-961, 2009 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **The impact of 3G mobile phone base station radiation on 14-3-3 family proteins in hepatocellular carcinoma cell line**

Books & Book Chapters

- I. **Non – Thermal Effects and Mechanisms of Interaction Between Electromagnetic Fields and Living Matter, An ICEMS Monograph, National Institute for the Study and Control of Cancer and Environmental Diseases**
SEYHAN H. N. , GÜLER ÖZTÜRK G., KURSUN A. G. , SİRAN B., ÖZGÜR BÜYÜKATALAY E., TÜYSÜZ M. Z.
in: Non Thermal Effects and Mechanisms of Interaction Between Electromagnetic Fields and Living Matter An ICEMS Monograph National Institute for the Study and Control of Cancer and Environmental Diseases, L. Giuliani and M. Soffritti, Editor, Mattioli1885 spa, Fidenza, pp.319-322, 2010

Refereed Congress / Symposium Publications in Proceedings

- I. **The role of NF-kB inflammatory response of RFR-exposed colon cancer cell lines.**
ŞENTÜRK F., ÖZGÜR BÜYÜKATALAY E., KISMALI G., SEL T., GÜLER ÖZTÜRK G.
International 30th Annual Biophysics Congress, 10 - 13 October 2018
- II. **The role of NF-kB and p-SAPK/JNK inflammatory responses of RFR- exposed colon cancer cells.**
ŞENTÜRK F., ÖZGÜR BÜYÜKATALAY E., KISMALI G., SEL T., GÜLER ÖZTÜRK G.
BioEM2018, 24 - 29 June 2018
- III. **Radiofrequency radiation (RFR) induces Bad, p-Bad activation leading to cell apoptosis on DLD1 human colon carcinoma cell lines.**
ÖZGÜR BÜYÜKATALAY E., ŞENTÜRK F., KISMALI G., SEL T., GÜLER ÖZTÜRK G.
BioEM2018, 24 - 29 June 2018
- IV. **THE EFFECT OF SHORT TERM AND LONG TERM EXPOSURES TO 3G-MOBILE PHONE RADIATION ON DETOXIFICATION ORGANS OF WISTAR RATS**
TOMRUK A., TURAL R., ÖZGÜR BÜYÜKATALAY E., SEPİCİ DİNÇEL A., GÜLER ÖZTÜRK G.
ULUSLARARASI BİYOKİMYA KONGRESİ 2017, 19 - 23 September 2017
- V. **THE EFFECTS OF SHORT TERM AND LONG TERM EXPOSURES TO 3G-MOBILE PHONE RADIATION ON DETOXIFICATION ORGANS OF WISTAR RATS**
TOMRUK A., TURAL R., ÖZGÜR BÜYÜKATALAY E., SEPİCİ DİNÇEL A., GÜLER ÖZTÜRK G.
Uluslararası Biyokimya Kongresi, Turkey, 19 - 23 September 2017, pp.36
- VI. **Kolorektal Kanser Hücrelerinde Radyofrekans Alanların Tümör Baskılayıcı Gen Proteinlerine Etkisi**
ÖZGÜR BÜYÜKATALAY E., KISMALI G., SEL T., GÜLER ÖZTÜRK G.
28-29. Ulusal Biyofizik Kongresi (Uluslararası Katılımlı), İstanbul, Turkey, 6 - 09 September 2017, pp.42
- VII. **The effects of 2100 MHz UMTS modulated mobile phone radiation on estrogen metabolism in MCF 7 and HGF 1 cells in vitro**
ÖZGÜR BÜYÜKATALAY E., ATEŞ K., OĞUR R., GÜLER ÖZTÜRK G., SEYHAN H. N.
BIOEM 2016, 5 - 10 June 2016, pp.97
- VIII. **Uzun dönem cep telefonu maruziyetinin ratlarda beyin dokusu DNA hasarı üzerine etkileri**
ÖZGÜR BÜYÜKATALAY E., ŞAHİN D., GÜLER ÖZTÜRK G., TOMRUK A., ÜNLÜ İ., SEPİCİ DİNÇEL A., SEYHAN H. N.
27. Ulusal Biyokimya Kongresi, 3 - 06 November 2015, vol.40
- IX. **Uzun Dönem Cep Telefonu Maruziyetinin Ratlarda Beyin Dokusu DNA Hasarı Üzerine Etkileri**
ÖZGÜR BÜYÜKATALAY E., ŞAHİN D., GÜLER ÖZTÜRK G., TOMRUK A., ÜNLÜ İ., SEPİCİ DİNÇEL A., SEYHAN H. N.
XXVII. Ulusal Biyokimya Kongresi, Antalya, Turkey, 3 - 06 November 2015, pp.40
- X. **Radyo Frekans Alanların Hamileler Yeni Doğanlar ve Çocuklar Üzerinde Oluşturabileceği Sağlık Etkileri ve Alınması Gereken Önlemler**
GÜLER ÖZTÜRK G., ÖZGÜR BÜYÜKATALAY E.

Elektromanyetik Alanlar ve Etkileri, EMANET 2015, Mersin, Turkey, 13 - 15 October 2015

- XI. **Kanser Tanı Ve Tedavisinde Düşük Seviyeli Elektromanyetik Alanlar**
ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., KISMALI G., TOMRUK A.
27. Ulusal Biyofizik Kongresi, Mersin, Turkey, 29 September - 03 October 2015, pp.53-55
- XII. **Anne Karnında Radyo Frekans Radyasyona Maruziyet ile Tetiklenen Nörodejeneratif Değişimler ve Apoptoz**
GÜLER ÖZTÜRK G., ÖZGÜR BÜYÜKATALAY E., TOMRUK A., KELEŞ H., VURAL ATALAY S., SEYHAN H. N.
27. Ulusal Biyofizik Kongresi, Turkey, 29 September - 03 October 2015, pp.138-139
- XIII. **3G Cep Telefonu 2100 MHz Radyofrekans Radyasyonun Sıçanların Parotis Bezine Etkisi**
AYDOĞAN F., ÜNLÜ İ., AYDIN E., YUMUŞAK N., DEVRİM E., SAMİM E., ÖZGÜR BÜYÜKATALAY E., UNSAL V., TOMRUK A., GÜLER ÖZTÜRK G., et al.
11. Uluslararası Kulak Burun Boğaz ve Baş Boyun Cerrahisi Kongresi, Ankara, Turkey, 17 - 19 April 2014, pp.30
- XIV. **Sıçanlarda 2100 MHz frekanslı Radyofrekans Radyasyonun Nazal Mukoza ve Mukosilier Klirens Üzerine Etkileri**
AYDOĞAN F., AYDIN E., ÖZGÜR BÜYÜKATALAY E., ATILLA P., TÜZÜNER A., DEMİRCİ Ş., TOMRUK A., GÜLER ÖZTÜRK G., SEYHAN H. N., KORKMAZ M., et al.
11. Uluslararası Kulak Burun Boğaz ve Baş Boyun Cerrahisi Kongresi, Ankara, Turkey, 17 - 19 April 2014, pp.41
- XV. **The Influence of 1800 MHz GSM like signals on blood chemistry and oxidative stress in non pregnant and pregnant rabbits**
SEYHAN H. N., KISMALI G., ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., AKÇAY A., SEL T.
BIOEM2013, Thessaloniki, Greece, 10 - 14 June 2013, pp.88
- XVI. **Effects of ginkgo biloba EGb 761 treatment on 2.1 GHz microwave radiation induced mutagenicity in human lymphocytes**
EŞMEKAYA M. A., AYTEKİN E., ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., ERGÜN M. A., SEYHAN H. N.
4th International Congress on Cell Membranes and Oxidative Stress: Focus on Calcium Signaling and TRP Channels, 26 - 29 June 2012
- XVII. **Modülasyonlu Radyofrekans Radyasyon uygulamasının İnsan Kan Lenfositleri üzerindeki Mutagenetik Etkileri**
EŞMEKAYA M. A., ERGÜN M. A., ÖZGÜR BÜYÜKATALAY E., GÜLER ÖZTÜRK G., ÖMEROĞLU S., SEYHAN H. N.
22. Ulusal Biyofizik Kongresi, Turkey, 28 September - 01 October 2010

Supported Projects

ÖZGÜR BÜYÜKATALAY E., Project Supported by Higher Education Institutions, Radyofrekans Alanlar Kolorektal Kanser Hücrelerinde Apoptosizi ve İnflamasyonu Tetikler mi?, 2015 - 2019

Citations

Total Citations (WOS):159

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