

## Asst. Prof. ARIN TOMRUK

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAC-2550-2021

ScopusID: 24482248900

Yoksis Researcher ID: 112867

### Education Information

Doctorate, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (Dr), Turkey 2008 - 2017

Postgraduate, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (YI) (Tezli), Turkey 2005 - 2008

Undergraduate, Ankara University, Fen Fakültesi, Biyoloji Bölümü, Turkey 1998 - 2002

### Dissertations

Doctorate, Radyofrekans alanların insan kolorektal karsinom hücrelerinde kaspaz-bağımlı apoptoz üzerine etkileri, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (Dr), 2017

Postgraduate, Radyo frekans radyasyonunun hamile ve hamile olmayan tavşanlarda dna ve oksidatif hasara etkilerinin hplc ve spektrofotometrik yöntemlerle incelenmesi, Gazi University, Sağlık Bilimleri Enstitüsü, Biyofizik (YI) (Tezli), 2008

### Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Biophysics

### Academic Titles / Tasks

Assistant Professor, Gazi University, Tıp Fakültesi, Temel Tıp Bilimleri, 2023 - Continues

Research Assistant PhD, Gazi University, Tıp Fakültesi, Temel Tıp Bilimleri, 2005 - 2023

### Academic and Administrative Experience

University Executive Board Member, Gazi University, 2019 - 2020

### Courses

Membran Potansiyelinin Pasif Yayılımı, Undergraduate, 2017 - 2018  
Sinir Hücrelerinde Yapı Fonksiyon İlişkisi, Undergraduate, 2017 - 2018  
Dolaşım ve Solunum Sistemlerinin Elektriksel Stimülasyonu, Undergraduate, 2017 - 2018  
Solunum Sistemi Biyomekaniği, Undergraduate, 2017 - 2018  
Elektromanyetik Kirlilik ve EM Alan kaynakları, Undergraduate, 2017 - 2018  
Dolaşım Sistemi Biyomekaniği, Undergraduate, 2017 - 2018  
Kas İskelet Biyofiziği, Undergraduate, 2017 - 2018  
Electromagnetic Pollution and EM Sources, Undergraduate, 2017 - 2018  
Kas İskelet Biyomekaniği, Undergraduate, 2017 - 2018  
Extremely Low Frequency (ELF) Electromagnetic Fields and Biological Effects, Undergraduate, 2017 - 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **The histological and biochemical analysis of the effects of radiofrequency radiation on testis tissue of rats and the protective effect of melatonin**  
Yardim A., ARAL B., TOMRUK A., Oruç S., Delen K., Kuzay D., SEYMEN C. M., TAKE KAPLANOĞLU G.  
Turkish Journal of Medical Sciences, vol.54, no.4, pp.858-865, 2024 (SCI-Expanded)
- II. **Short-term exposure to radiofrequency radiation and metabolic enzymes' activities during pregnancy and prenatal development**  
TOMRUK A., ÖZGÜR BÜYÜKATALAY E., Ozturk G., Uлуу N. N.  
ELECTROMAGNETIC BIOLOGY AND MEDICINE, vol.41, no.4, pp.370-378, 2022 (SCI-Expanded)
- III. **Assessment of the effects of radiofrequency radiation on human colon epithelium cells**  
TOMRUK A., Terzi Y. K., Guler O. G.  
BRATISLAVA MEDICAL JOURNAL-BRATISLAVSKE LEKARSKE LISTY, vol.120, no.4, pp.299-308, 2019 (SCI-Expanded)
- IV. **Effects of cell phone radiation on lipid peroxidation, glutathione and nitric oxide levels in mouse brain during epileptic seizure**  
EŞMEKAYA M. A., Tuysuz M. Z., TOMRUK A., CANSEVEN KURŞUN A. G., Yucel E., Aktuna Z., Keskil S., Seyhan N.  
JOURNAL OF CHEMICAL NEUROANATOMY, vol.75, pp.111-115, 2016 (SCI-Expanded)
- V. **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 (SCI-Expanded)
- VI. **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 (SCI-Expanded)
- VII. **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., Seyhan N., et al.  
INTERNATIONAL FORUM OF ALLERGY & RHINOLOGY, vol.5, no.7, pp.626-632, 2015 (SCI-Expanded)
- VIII. **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 (SCI-Expanded)
- IX. **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., et al.  
AMERICAN JOURNAL OF OTOLARYNGOLOGY, vol.36, no.1, pp.39-46, 2015 (SCI-Expanded)

- X. **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 (SCI-Expanded)
- 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 (SCI-Expanded)
- XII. **The effect of radiofrequency radiation on DNA and lipid damage in non-pregnant and pregnant rabbits and their newborns**  
GÜLER ÖZTÜRK G., TOMRUK A., Ozgur E., Seyhan N.  
GENERAL PHYSIOLOGY AND BIOPHYSICS, vol.29, no.1, pp.59-66, 2010 (SCI-Expanded)
- XIII. **The Influence of 1800 MHz GSM-like Signals on Hepatic Oxidative DNA and Lipid Damage in Nonpregnant, Pregnant, and Newly born Rabbits**  
TOMRUK A., GÜLER ÖZTÜRK G., SEPİCİ DİNÇEL A.  
CELL BIOCHEMISTRY AND BIOPHYSICS, vol.56, no.1, pp.39-47, 2010 (SCI-Expanded)
- XIV. **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 (SCI-Expanded)
- XV. **The protective effects of N-acetyl-L-cysteine and epigallocatechin-3-gallate on electric field-induced hepatic oxidative stress**  
Gueler G., Turkozer Z., TOMRUK A., Seyhan N.  
INTERNATIONAL JOURNAL OF RADIATION BIOLOGY, vol.84, no.8, pp.669-680, 2008 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Evaluation of The Effects of ELF-EMF on Oxidative Parameters in Brain, Liver and Heart Tissues**  
GÜLEÇ PEKER E. G., BALABANLI K. B., TOMRUK A., CANSEVEN KURŞUN A. G., COŞKUN CEVHER Ş.  
Karadeniz Fen Bilimleri Dergisi, vol.9, no.2, pp.264-274, 2019 (Peer-Reviewed Journal)

### Books & Book Chapters

- I. **Cellular enzymatic activity and free radical formation in various tissues under static and ELF electric and magnetic field exposure**  
SEYHAN H. N., CANSEVEN KURŞUN A. G., GÜLER ÖZTÜRK G., TOMRUK A., FİRLARER A.  
in: Non Thermal Effects and Mechanisms of Interaction Between Electromagnetic Fields and Living Matter, L. Giuliani ; M. Soffritti, Editor, Mattioli 1885 spa, Bologna, pp.157-177, 2010
- II. **Cellular enzymatic activity and free radical formation in various tissues under static and ELF electric and magnetic field exposure**  
SEYHAN H. N., CANSEVEN A. G., GÜLER ÖZTÜRK G., TOMRUK A., FİRLARER A.  
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.157-176, 2010

### Refereed Congress / Symposium Publications in Proceedings

- I. **50 Hz, 1.5mT Manyetik Alan Maruziyetinin Serbest Radikal Oluşumu Üzerine Olası Etkileri**  
TOMRUK A., GÜLEÇ PEKER E. G., COŞKUN CEVHER Ş., CANSEVEN KURŞUN A. G.

Elektrik-Elektronik Mühendisliği Kongresi 2019, Turkey, 14 - 16 November 2019

- II. **Bildiri No: 2650Hz / 1,5mT Manyetik Alan Maruziyetinin Serbest Radikal Oluşumu Üzerine Olası Etkileri**  
TOMRUK A., GÜLEÇ PEKER E. G., COŞKUN CEVHER Ş., CANSEVEN KURŞUN A. G.  
Elektrik Elektronik Mühendisliği Kongresi 2019 (EEMKON2019), Turkey, 14 - 16 November 2019
- III. **1,5mT Manyetik Alan Maruziyetinin Serbest Radikal Oluşumu Üzerine Olası Etkileri.**  
Tomruk A., Güleç Peker E. G., Coşkun Cevher Ş., Canseven Kurşun A. G.  
EEMKON 2019, İstanbul, Turkey, 14 - 16 November 2019
- 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. **Radyofrekans Radyasyona Maruz Bırakılan İnsan Kolorektal Karsinoma Hücrelerinde Kaspaz-Bağımlı Apoptozun İncelenmesi**  
TOMRUK A., TERZİ Y. K., GÜLER ÖZTÜRK G.  
XV. Ulusal Tıbbi Biyoloji ve Genetik Kongresi, Ölüdeniz Fethiye, Turkey, 26 - 29 October 2017, pp.326
- VI. **Radyofrekans radyasyona maruz bırakılan insan kolorektal karsinoma hücrelerinde kaspaz- bağımlı apoptozun incelenmesi**  
TOMRUK A., TERZİ Y. K., GÜLER ÖZTÜRK G.  
XV. Ulusal Tıbbi Biyoloji ve Genetik Kongresi (Uluslararası Katılımlı), Turkey, 26 - 29 October 2017
- VII. **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
- VIII. **The Effects of Radiofrequency Fields on Caspase-Dependent Apoptosis in Human Colorectal Carcinoma Cells**  
TOMRUK A., TERZİ Y. K., GÜLER ÖZTÜRK G.  
VI. International Congress of Molecular Medicine, İstanbul, Turkey, 22 - 25 May 2017, pp.68
- IX. **The Effects of Radiofrequency Fields on Caspase-Dependent Apoptosis in Human Colorectal Carcinomas Cells**  
TOMRUK A., TERZİ Y. K., GÜLER ÖZTÜRK G.  
VI. International Congress of Molecular Medicine: Molecular Medicine From The Updates Till The Futures, İstanbul, Turkey, 22 - 25 May 2017, pp.46
- X. **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
- XI. **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
- 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. **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
- XIV. **Sıçanlarda 2100 MHz frekanslı Radyofrekans Radyasyonun Nazal Mukoza ve Mukosiler 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. **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
- XVI. **The Influence of 1800 MHz GSM Like Signals on Hepatic Oxidative DNA and Lipid Damage in Pregnant and Newborn Rabbits**  
TOMRUK A., GÜLER ÖZTÜRK G., SEPİCİ A., SEYHAN H. N.  
BIOEM2013, 10 - 14 June 2013, pp.68
- XVII. **Oxidative DNA Damage After Acute Exposure to 50 Hz Magnetic Fields**  
KOCA C., Aydın M., CANSEVEN KURŞUN A. G., TOMRUK A., YİĞİTOĞLU M. R., SEYHAN H. N.  
The 2nd International Biophysics Congress and Biotechnology at GAP and 21st National Biophysics Congress Brochure, Diyarbakır, Turkey, 5 - 09 October 2009, pp.71-72
- XVIII. **The effect of 1800 MHz radiofrequency radiation on pentose phosphate pathway glutathione dependent enzymes activities in pregnant rabbits**  
Tandoğan B., TOMRUK A., GÜLER ÖZTÜRK G., SEYHAN H. N., ULUSU N. N.  
XVI. National Congress of Biochemistry, Ponta-Delgada, Portugal, 22 - 25 October 2008
- XIX. **N Acetyl Cysteine NAC inhibits ELF Electric Field induced Nitric Oxide production**  
TOMRUK A., GÜLER ÖZTÜRK G., SEYHAN H. N.  
International EMF Conference 2007: Electromagnetic Fields, Bioeffects Research, Medical Applications, and Standards Harmonization, Kuala-Lumpur, Malaysia, 4 - 06 June 2007
- XX. **The Relation Assessment Between 50 Hz Electric Field Exposure-Induced Protein Carbonyl Levels and The Protective Effect of Green Tea Catechin (EGCG)**  
TOMRUK A., Guler G., Seyhan N.  
11th Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON 2007), Ljubljana, Slovenia, 26 - 30 June 2007, vol.16, pp.230-233
- XXI. **Effect of intermittent and continuous exposure to 50 Hz 1.5 mT on lipid peroxidation in liver**  
CANSEVEN KURŞUN A. G., TOMRUK A., COŞKUN CEVHER Ş., SEYHAN H. N.  
The 4th International Workshop on Biological Effects of EMFs, Greece, 16 - 20 October 2006, vol.2, pp.1399-1402

## Supported Projects

TOMRUK A., ARAL B., CEYLAN M., Oruç S., Project Supported by Higher Education Institutions, Radyo Frekans Radyasyonunun Kardiyopulmoner Sistemde Sitokin Salınımları Üzerine Etkileri, 2021 - 2023

Umurhan G., Canseven Kurşun A. G., Tomruk A., Özler M., Çiçek Z., Garip B., Gürsoy G., Eşmekaya M. A., Project Supported by Higher Education Institutions, Titanyum dioksit (TiO<sub>2</sub>) ve UV-A Radyasyonunun meme ve deri kanseri hücreleri üzerine etkileri, 2019 - 2020

TOMRUK A., GÜLER ÖZTÜRK G., Project Supported by Higher Education Institutions, Radyofrekans Alanların Sağlıklı Tiroid Hücrelerinde Kaspaz-Bağımlı Programlı Hücre Ölümü Üzerine Olası Etkilerinin İncelenmesi, 2015 - 2019

TOMRUK A., GÜLER ÖZTÜRK G., Project Supported by Higher Education Institutions, Radyofrekans Alanların Sağlıklı Rat Tiroid Epitel Hücreleri Üzerine Etkileri, 2013 - 2019

## Metrics

Publication: 39  
Citation (WoS): 211  
Citation (Scopus): 287  
H-Index (WoS): 9  
H-Index (Scopus): 10