

# BELMA TURAN

## PROFESÖR

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## Öğrenim Bilgisi

Bütünleşik Doktora  
1977-1982

ANKARA ÜNİVERSİTESİ  
TIP FAKÜLTESİ/TEMEL TIP BİLİMLERİ/BİYOFİZİK ANABİLİM DALI

Tez adı: Kanda Bulunan Cu<sub>2</sub> ve Fe<sub>3</sub> Paragenetik Metal İyonları Özelliklerinden Yararlanılarak  
Normal ve Hasta İnsan Kanının ESR Yöntemiyle İncelenmesi (1982) Tez Danışmanı:(Ziya  
GÜNER)

Lisans  
1972-1976

ORTA DOĞU TEKNİK ÜNİVERSİTESİ  
FEN-EDEBİYAT FAKÜLTESİ/FİZİK BÖLÜMÜ

## Görevler

PROFESÖR  
2020-

LOKMAN HEKİM ÜNİVERSİTESİ  
TIP FAKÜLTESİ/TEMEL TIP BİLİMLERİ BÖLÜMÜ/BİYOFİZİK ANABİLİM DALI

FELLOW  
2005

INTERNATIONAL ACADEMY OF CARDIOVASCULAR SCIENCES  
CARDIOVASCULAR RESEARCHES

PROFESÖR  
1993-2020

ANKARA ÜNİVERSİTESİ  
TIP FAKÜLTESİ/TEMEL TIP BİLİMLERİ BÖLÜMÜ/BİYOFİZİK ANA BİLİM DALI

DOÇENT  
1987-1993

ANKARA ÜNİVERSİTESİ  
TIP FAKÜLTESİ/TEMEL TIP BİLİMLERİ BÖLÜMÜ/BİYOFİZİK ANA BİLİM DALI)

DR. ARAŞTIRMA GÖREVLİSİ  
1984-1987

ANKARA ÜNİVERSİTESİ  
TIP FAKÜLTESİ/TEMEL TIP BİLİMLERİ BÖLÜMÜ/FİZYOLOJİ ANA BİLİM DALI)

DR. ARAŞTIRMA GÖREVLİSİ  
1982-1984

ANKARA ÜNİVERSİTESİ

TIP FAKÜLTESİ/TEMEL TIP BİLİMLERİ BÖLÜMÜ/MEDİKAL FİZİK/BİYOFİZİK ANA BİLİM DALI)

ARAŞTIRMA GÖREVLİSİ  
1977-1982

ANKARA ÜNİVERSİTESİ  
MEDİKAL FİZİK KÜRSÜSÜ

## Yönetilen Tezler

### Yüksek Lisans

1. Mesut Kılıç: Selenyum ve E vitamin eksikliği: papiller kasın elektrofizyolojik ve mekaniksel fonksiyonları, 1997.
2. Murat Ayaz: Selenyumun deneysel diyabetik sıçan kalbi ventrikül kasının elektriksel ve mekaniksel aktivitesi üzerine etkileri, 2000.
3. Tülay Tuncer: E vitamininin deneysel diyabetik sıçan atriyal aktiviteleri üzerindeki etkilerinin elektrofizyolojik yöntemlerle incelenmesi, 2000.
4. Ayça Bilginoğlu: Diyabetik kardiyomiyopatide  $\beta$ -adrenergic reseptör yanıtları, 2005.
5. Pınar Şam: Yaşlanmanın kalpteki  $\beta$ -adrenergic reseptör yanıtları üzerindeki etkisinin incelenmesi, 2006.
6. Evrim Tanrıverdi: Deneysel diyabette gözlenen vasküler fonksiyon bozukluklarında sodyumselenat uygulamasının etki mekanizmalarının incelenmesi, 2007.
7. Erkan Tuncay: Diyabetik kardiyomiyopatide seçici olmayan beta blokör etkilerinin elektrofizyolojik yöntemlerle incelenmesi, 2008.
8. Aytaç Seymen: Yaşlanmaya bağlı kalp fonksiyon değişikliklerinde beta adrenerjik sistemin rolünün elektrofizyolojik yöntemlerle incelenmesi, 2008.
9. Esma Nur Zeydanlı: Matriks metalloproteneazların diyabetik sıçanların endotel bağımlı damar fonksiyonlarındaki rolü, 2008.
10. Samet Yıldırım: Diyabetik kardiyomiyopatide mikroRNA'ların rolü, 2010.
11. Vedia Deletioğlu: Çinko ve selenyumun antioksidan özelliklerinin oksidatif stres induklü DNA radikallerinin immün-spin yakalama yöntemi kullanılarak incelenmesi, 2015.
12. Sinan Değirmenci: Ventriküler kardiyomiyositlerde hücre içi serbest Zn<sup>2+</sup> artışının K-kanal akımlarına etkilerinin incelenmesi, 2016.

13. Gülay Sencar: Lipoik asitin yaşlı Memeli Kalp Fonksiyonuna Etkisinin Yaşlanması Modeli Geliştirilmiş Ventriküler H9C2 Hücre Hattında Mitokondri Fonksiyonu İncelenerek Değerlendirilmesi. 2018, Devam ediyor (Eş danışman; Disiplinler arası Gıda, Metabolizma ve Klinik Beslenme programı).

14. İrem Aktay: Biyofizik, Devam ediyor, 2019 (Eş danışman).

15. Kardelen Genç: Kök Hücre, Devam ediyor, 2020 (Eş danışman)

## Doktora

1. Ömer Hotomaroğlu: Ventrikül kasılma sırasında oksidan stresin rolünün elektrofizyolojik olarak incelenmesi, 1996.
2. Mehmet Uğur: Hücre dışı adenosin trifosfat uygulamasının izole kardiyak miyositlerdeki etkilerinin tüm-hücre patch clamp yöntemi ile incelenmesi, 2000.
3. Murat Ayaz: Deneysel diyabetik kardiyomiyopatide hücre içi serbest iyon derişimi, 2004
4. Semir özdemir: Anjiyotensin II reseptörünün deneysel diyabetik sıçan kalbi elektriksel aktivitesindeki rolü, 2004.
5. Nazmi Yaraş: Diyabetik sıçan kalbi kalsiyum homeostazını düzenleyen mekanizmaların incelenmesi, 2007.
6. Ayça Bilginoğlu: Kardiyomiyositlerde hücre içi sodyum homeostazında rol oynayan faktörlerin incelenmesi, 2010
7. Aylin Geçer: Suda çözünen nanokitosan sentezi, 2010 (Eş danışman, Fen bilimleri enstitüsü).
8. Erkan Tuncay: Kalp fonksiyon bozukluğunda rol oynayan hücre içi Zn<sup>2+</sup> derişimi ve kontrollsüz sarkoplazmik retikulum Ca<sup>2+</sup> sızıntısı arasındaki ilişkinin elektrofizyolojik ve biyokimyasal tekniklerle incelenmesi, 2014
9. H. Burak Kandilci; İzole memeli ventriküler miyositlerinde sodyum-hidrojen değiş- tokuşcusunun hioksik duyarlığı ATPnin rolü, 2014.
10. Esma Nur Okatan: Diyabet kaynaklı kalp fonksiyon bozukluğunda hücre içi iyon derişimleri ile fosfodiesterazların aktiviteleri arasındaki ilişkinin tip 2 obez-sıçan modelinde incelenmesi, 2015.
11. Ayşegül Toy Durak: İnsülin Direnci Gelişmiş Sıçan Kardiyomiyositlerinde İyon Kanallarının Fonksiyon ve Yapısının Elektrofizyolojik ve Moleküler Biyolojik Tekniklerle İncelenmesi, 2017.
12. Yusuf Olgar: Çinko- taşıyıcıları ve mitokondri ilişkisinin yaşlanmaya bağlı kalp fonksiyon bozukluğundaki rolünün incelenmesi, 2018.
13. Sinan Değirmenci: Sıçan atriyal hücrelerinde ATP duyarlı K+-kanalların incelenmesi, 2018 (devam ediyor)
14. Bengisu Kevser Bulduk: 2019, Ders aşamasında (Disiplinler arası Kök Hücre programı,donduruldu).

## Araştırma Alanları

Kardiak elektrofizyoloji  
Kalsium iyon regülatörleri  
Çinko iyon regülatörleri  
Oksidant stres  
Antioksidanlar  
Diyabetik kardiyomiyopati  
Yaşlanma ve kalp fonksiyon bozukluğu  
Sarko(endo)plazmik reticulum-mitokondri komunikasyonu

## Projelerde Yaptığı Görevler

### TÜBİTAK Projeleri

- 1- Kardiyomiyositlerde Endoplazmik Retikulum stresi hücre içi serbest Zn Regülasyonu ve mitokondri arasındaki çapraz ilişkinin kalp fonksiyon bozukluğu patolojisindeki rolünün incelenmesi, Tübitak SBAG-119S661, 01 Kasım 2019 – 01 Ocak 2022 (Yürütücü, devam ediyor).
- 2- Çinko- taşıyıcıları ve mitokondri ilişkisinin yaşlanmaya bağlı kalp fonksiyon bozukluğunundaki rolünün incelenmesi, Tübitak SBAG-216S979, 15 Mart 2018- 15 Mart 2021 (Yürütücü, devam ediyor).
- 3- Hipertrofik kardiyomiyositlerde  $\beta$ 3adrenerjik reseptör aktivasyonunun hücre içi  $Ca^{2+}$  ve  $Na^+$  homeostazları üzerindeki olası rolünün incelenmesi, Tübitak SBAG-214S254, 15 Nisan 2015-15 Nisan 2018 (Yürütücü, tamamlandı).
- 4- Hipertrofik Kalp Yetmezliği Modelinde Rho-Kinaz'ın Rolünün Elektrofizyolojik Yöntemlerle İncelenmesi, Tübitak SBAG-113S296, 15 Eylül 2013-15 Eylül 2015 (Araştırmacı, tamamlandı).
- 5- Kardiyomiyositlerde endoplazmik retikulum stresi, hücre içi serbest  $Zn^{2+}$  regülasyonu ve mitokondri arasındaki çapraz ilişkinin kalp fonksiyon bozukluğu patolojisindeki rolünün incelenmesi, Tübitak SBAG-113466, 15 Kasım 2013-15 Kasım 2016 (Yürütücü, tamamlandı).
- 6- Kalp fonksiyon bozuklığında rol alan kontrollsüz sarkoplazmik retikulum  $Ca^{2+}$  sızıntısı ile ilgili moleküller mekanizmaları, Tübitak SBAG-111S042, 01 Eylül 2011-01 Eylül 2014 (Yürütücü, tamamlandı).
- 7- Hipoksinin normal ve hiperglisemik HL1 kardiyomiyositlerinde  $Na/H$  değiştokuşusu ve  $Na/HCO_3$  ko-transportu aktive ve ekspresyonu üzerine etkileri, Tübitak SBAG-109S267, 15 Mart 2010-15 Mart 2013 (Yürütücü, tamamlandı).
- 8- Kardiyomiyositlerde Hücre içi  $Zn^{2+}$  Homeostazı: Hücre içi Serbest  $Zn^{2+}$  ve Matriks Metalloproteinazlarının rolü, Tübitak SBAG-107S427, 01 Mart 2008-01 Mart 2011 (Yürütücü, tamamlandı).
- 9- Tip I diyabetik kardiyomiyopatide yeni bir tedavi hedefi: Ryanodin reseptörleri, Tübitak SBAG- SBAG-107S304, 15 Nisan 2008-15 Nisan 2011 (Yürütücü, tamamlandı).
- 10- Diyabetik kardiyomiyopatide tedavi için yeni ilaç hedefleri, Tübitak SBAG- SBAG- 105S149, 01 Ocak 2006-01 Ocak 2008 (Yürütücü, tamamlandı).
- 11- Diyabetik sıçan kardiyomiyositlerinde beta-adrenerjik reseptör yanıtları, Tübitak SBAG- 104S591, 01 Temmuz 2005-01 Temmuz 2007 (Yürütücü, tamamlandı).

- 12- Antioksidanların diyabette gözlenen çeşitli organ fonksiyon bozukluklarına etkilerinin elektrofizyolojik, biyomekanik ve moleküler biyofizik yöntemlerle incelenmesi, Tübitak SBAG-1732, 01 Ağustos 1997-01 Ağustos 1999 (Yürüttü, tamamlandı).
- 13- Kalbin regülasyonunda oksidant stresin rolünün elektrofizyolojik yöntemlerle incelenmesi, Tübitak, SBAG-AYD-69, 01 Ekim 1995-01 Ekim 1996 (Yürüttü, tamamlandı).
- 14- Kalp ve damarda endotel ve kas hücreleri ilişkilerinin incelenmesi, Tübitak SBAG-1253, 01 Kasım 1994-01 Kasım 1997 (Araştırmacı, tamamlandı).
- 15- Osteoporotik insan ve hayvan kemiklerinde malzeme özelliklerinin mekanik ve ultrasonik yöntemlerle incelenmesi, Tübitak MISAG-27, 30 Eylül 1992-31 Mart 1995 (Araştırmacı, tamamlandı).

### **Devlet Planlama Teşkilatı (DPT)**

- 1- Anjiyotensin reseptör antagonistlerinin diyabetik kardiyomiyopati tedavisinde rolü, DPT 2001K120-240, 26 Nisan 2005-26 Nisan 2007, (Yürüttü, tamamlandı).
- 2- İki Foton Floresan Lazer Mikroskopi Hücresel Görüntüleme Sistemi, DPT 2003K120-240, 31 Aralık 2006-31 Aralık 2007 (Yürüttü, tamamlandı).
- 3- Hücreçi iyon görüntüleme sistemi, DPT 99K120190, 01 Ocak 2000-01 Ocak 2003 (Yürüttü, tamamlandı).

### **Bilimsel Araştırma Projeleri (BAP)**

- 1- Memeli atriyal hücrelerinde aTPduyarlı katyon kanallarının yaşlanmamay bağlı kalp fonksiyon değişikliklerindeki rolünün incelenmesi, 19L0230014, 16 Eylül 2019-16 Eylül 2021 (Yürüttü, devam ediyor).
- 2- İnsülin direnci gelişmiş sıçan kardiyomiyositlerinde iyon kanallarının fonksiyon ve yapısının elektrofizyolojik ve biyokimyasal yöntemlerle incelenmesi, 16L0230004, 01 Eylül 2016-01 Eylül 2018 (Yürüttü, tamamlandı).
- 3- Kardiyomiyosit ve nöronal kültüre hücrelerde hücre içi serbest iyonların değişimlerinin karşılaştırımalı olarak incelenmesi, 12B3330005, 02 Ocak 2012-02 Ocak 2014 (Yürüttü, tamamlandı).
- 4- Kardiyomiyositterde hücreçi Na<sup>+</sup> ve H<sup>+</sup> homeostazında rol oynayan faktörlerin incelenmesi 09B3330011, 15 Nisan 2009-15 Nisan 2011 (Yürüttü, tamamlandı).
- 5- Diyabetik sıçan kalbinin omega3E'ye mekaniksel ve elektriksel yanıtları, 2006-08-09233, 27 Nisan 2006-27 Nisan 2009 (Yürüttü, tamamlandı).
- 6- Deneysel diyabetik kardiyomiyopatide hücreçi serbest iyon derişimi, 2003-08-09098, 25 Şubat 2003-25 Şubat 2005 (Yürüttü, tamamlandı).
- 7- Anjiyotensin II reseptörünün deneysel diyabetik sıçan kalbi uyarılma-kasılma çiftlenimindeki rolünün incelenmesi, 2003-08-09110, 01 Ocak 2003-01 Ocak 2005 (Yürüttü, tamamlandı).
- 8- Anjiyotensin reseptör antagonistlerinin deneysel diyabetik sıçan kalbi elektriksel aktivitesine etkileri, 2001-08-09061, 01 Haziran 2001-01 Kasım 2002 (Yürüttü, tamamlandı).
- 9- Deneysel diyabetik sıçan kalbi atriyal ve papiller kasında gözlenen değişikliklerin simültane olarak elektrofizyolojik yöntemlerle incelenmesi, 99-09-00-10, 29 Kasım 1999-29 Kasım 2001 (Yürüttü, tamamlandı).
- 10- Deneysel diyabetik kardiyomiyopatinin Ca-kanal kinetiklerine etkisinin patch-clamp yöntemi ile incelenmesi, 98-09-00-05, 01 Ocak 1997-01 Ocak 1998 (Yürüttü, tamamlandı).
- 11- Kalp kası regülasyonunda uyarılma kasılma çiftlenimi üzerine etkili faktörlerin araştırılması, 90-09-00-28, 10 Ocak 1991-10 Ocak 1994 (Yürüttü, tamamlandı).

## **Uluslararası Projeler**

- 1- COST Action CA 19137: Sudden cardiac arrest prediction and resuscitation network: Improving the quality of care, May 2020 –May 2024 (MC member, devam ediyor).
- 2- COST Action CA 16225: EU-CARDIOPROTECTION, October 2017- March 2022 (MC member, devam ediyor).
- 3- COST Action CA 15203: MitoEAGLE, December 2016- May 2021 (MC member, devam ediyor).
- 4- COST Action TD 1304: Zinc-Net, October 2013 – October 2017 (MC member, tamamlandı).
- 5- COST Action CM 1003: Biological oxidation reactions - mechanisms and design of new catalysts, May 2011- May 2015 (MC member, tamamlandı).
- 6- COST Action BM 1203: EU-ROS, December 2012- December 2016 (MC member, tamamlandı).
- 7- COST Action TD0901: Hypoxia sensing, signalling and adaptation, November 2009- November 2013 (MC member, tamamlandı).
- 8- COST Action BM 0602: Adipose Tissue: A Key Target for Prevention of the Metabolic Syndrome, December 2008 December 2011 (MC member, tamamlandı).

## **İdari Görevler**

ANA BİLİM DALI BAŞKANI 2020	LOKMAN HEKİM ÜNİVERSİTESİ TIP FAKÜLTESİ/ TEMEL TIP BİLİMLERİ BÖLÜMÜ/ BİYOFİZİK ANA BİLİM DALI
ANA BİLİM DALI BAŞKANI 2000-2020	ANKARA ÜNİVERSİTESİ TIP FAKÜLTESİ/ TEMEL TIP BİLİMLERİ BÖLÜMÜ/ BİYOFİZİK ANA BİLİM DALI
EĞİTİM SORUMLUSU (BİYOFİZİK, DÖNEM I-DÖNEM II) 1993-2020	ANKARA ÜNİVERSİTESİ TIP FAKÜLTESİ/ TEMEL TIP BİLİMLERİ BÖLÜMÜ/ BİYOFİZİK ANA BİLİM DALI
GENEL SEKRETER 1998-2000	TÜRK BİYOFİZİK DERNEĞİ
UYGULAMA LAB. KOMİSYON ÜYESİ 2003-2020	ANKARA ÜNİVERSİTESİ TIP FAKÜLTESİ
DENEY HAYVANLARI KOM. BAŞK. 2018-2020	ANKARA ÜNİVERSİTESİ TIP FAKÜLTESİ

## **Ödüller- Burslar**

Distinguished Leadership Award in Cardiovascular Sciences, International Academy of Cardiovascular Sciences, 2019

Deneysel Diyabetoloji Kategorisi Birincilik ödülü, Türk Diyabet Vafki ve Diyabet Derneği, 2017

Excellence in Cardiovascular Sciences Award, International Academy of Cardiovascular Sciences, 2014

Araştırmacı Öğretim Üyesi Bursu, YÖK, 2012

Lifetime Achievement Award in Cardiovascular Sciences, Medicine and Surgery, International Academy of Cardiovascular Sciences, 2011

International Travel Award of American Biophysical Society, American Biophysical Society, 2006

Distinguished Service Award in Cardiovascular Sciences, Medicine and Surgery, International Academy of Cardiovascular Sciences, 2005

Foreinger Grants, French Ministry, 1993-1999 (2 yıl)

Foreinger Grants, French Ministry 2000-2007 (1 yıl 4 ay)

Poster Birincilik Ödülü, Türk Biyofizik Derneği, 1999

Sağlık Bilimleri Araştırma birincilik ödülü, Ankara Üniversitesi, 1998

Araştırma Desteği, Ankara Üniversitesi, 1992

Genç Araştırmacı bursu, International Centre for Theoretical Physics, 1986

Genç Araştırmacı bursu, International Centre for Theoretical Physics, 1984

## **Yurt Dışı Uzun ve Kısa Süreli Görevlendirmeler**

<b>GÖREV DÖNEMİ</b>	<b>ÜNVAN</b>	<b>ÜNİVERSİTE</b>	<b>BÖLÜM</b>
2012 (Haziran-Eylül)	Misafir Araştırmacı	NIH National Institute of Environmental Health Sciences	Free radical metabolism
2007 (3 hafta)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
2006 (4 hafta)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
2005 (2 hafta)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
2004 (4 hafta)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
2003 (Nisan-Eylül)	Misafir Araştırmacı	Univ. Manitoba	Inst. Cardiovasc. Sciences
2003 (Ekim-Aralık)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
2000 (Temmuz, 4 hafta)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
1999 (Mayıs-Eylül)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
1998 (Mayıs-Ağustos)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire

1997 (Ağustos, 4 hafta)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
1995 (Mayıs-Eylül)	Misafir Araştırmacı	Ottawa University	Physiology
1994 (Haziran, 4 hafta)	Misafir Araştırmacı	Ottawa University	Physiology
1994 (Temmuz-Eylül)	Misafir Araştırmacı	INSERM U-390	Physiopathologie Cardiovasculaire
1993 (Haziran-Temmuz)	Misafir Araştırmacı	INSERM U-241	Laboratoire de Physiologie Cellulaire Cardiaque
1992 (Haziran-Eylül)	Misafir Araştırmacı	INSERM U-241	Laboratoire de Physiologie Cellulaire Cardiaque

## Eserler

### A. WEB of SCI- Indexine Kayıtlı Dergilerde Yayınlanan Makaleler

1. Delilbaşı E., Turan B., Yücel E., Temizer A., Kır S. The quantitative investigation of infrared Laser effects on the level of copper and zinc in various tissues, Clinical Physics and Physiological Measurements, 9(4), 375-377, 1988.
2. Delilbaşı E., Turan B., Yücel E., Şaşmaz R., Işımer A., Sayal A. Selenium and Behcet's Disease, Biological Trace Element Research, 28(1), 21-25, 1991.
3. Turan B., Dalay N., Delilbaşı E. A Possible Relationship Between Serum Satellite DNA and Cellular Antioxidative Mechanism, Spectroscopy Letters, 24(6), 865-871, 1991.
4. Turan B., Yılmaz A., Dalay N. Effects of Selenium Supplementation on the NMR Proton Relaxation Time T1 in Plasma, Spectroscopy Letters 25(8), 1405-1410, 1992.
5. Turan B., Delilbaşı E., Dalay N., Sert S., Afrasyap L., Sayal A. Serum Selenium and Glutathione-Peroxidase Activities and Their Interaction with Toxic Metals in Dialysis and Renal Transplantation Patients, Biological Trace Element Research, 33(3), 95-102, 1992.
6. Turan, B., Delilbaşı E., Sınav, B., Akkaş, N. Zinc-Calcium Interaction in heparin Induced osteoporotic Rabbit Plasma, Trace Elements and Electrolytes, 13 (3), 138-142, 1996.
7. Turan, B., Desilets, M., Acan, L. N., Hotomaroğlu, Ö., Vannier, C., Vassort, G. Oxidative Effects of Selenite on Rat Ventricular Contractility and Ca Movements, Cardiovascular Research, 32, 351-361, 1996.
8. Turan B., Koç E., Zaloğlu N. Deficiency and Toxicity of Selenium Alter the Acetylcholine stimulated contraction of Isolated Rabbit Ileum. Trace Elements and Electrolytes, 14(1), 13-18, 1997.
9. Turan B., Zaloğlu N., Koç E., Saran Y., Akkaş N. Dietary Selenium and Vitamin E Induced Alterations in Some Rabbit Tissues. Biological Trace element Research, 58 (1-2), 1-14, 1997.
10. Turan B., Fliss H., Desilets M. Oxidant-Induced Alteration of Intracellular Free-Zn<sup>2+</sup> Concentration in Rabbit Ventricular Myocytes, Am. J. Physiology, 272, (Heart Circ.Physiol. 41), H2095-H2106, 1997.
11. Turan B., Balçık C., Akkaş N. Effect of Dietary Selenium and Vitamin E on the, Biomechanical Properties of Rabbit Bones. Clinical Rheumatology, 16(5), 441-449, 1997.
12. Akkas N., Yeni Y. N., Turan, B., Delilbaşı, E., Günel, U. Effect of Medication on

Biomedical Properties of Rabbit Bones: Heparin Induced Osteoporosis, Clin. Rheumatology, 16(6), 585-595, 1997.

13. Turan. B., Koç E., Hotomaroğlu O., Kızıltan E., Yıldırım S., Demirel E. Dose and Tissue Dependent Effects of Sodium Selenite on Muscle Contraction. Biological Trace Element Research, 62, 265-280, 1998
14. Baştuğ M., Ayhan S., Turan B. The Effects of Altered Selenium and Vitamin E Nutritional Status on Learning and Memory of Third-generation Rats, Biol. Trace Elem. Research, 64, 151-160, 1998.
15. Demirel-Yılmaz E., Dinçer D., Yılmaz G., Turan B. Selenium and Vitamin E alter the microvascular permeability of rat organs. Biological Trace Element Research, 64, 161-168, 1998.
16. Turan B., Hotomaroğlu Ö., Kılıç M., Demirel-Yılmaz E. Cardiac Dysfunction induced by low and high diet antioxidant levels comparing selenium and vitamin E in rats. Regulatory Toxicology and Pharmacology, 29, 142-150, 1999.
17. Turan B., Saran Y., Can B., Güven M.C., Sayal A. Effect of high dietary selenium on the ultrastructure of rabbit cardiac muscle cell. Med. Sci. Res., 1999, 27(12); 795-799.
18. Ulusu N.N., N.L. Acan, Turan B., Tezcan E.F. The effect of selenium on glutathione redox cycle enzymes of some rabbit tissues. Trace Elements and Electrolytes, 2000, 17(1); 25-29.
19. Sayar K., M. Ugur, Gürdal H., Onaran O., Hotomaroğlu Ö., Turan B. Effect of dietary selenium intake on  $\beta$ -adrenergic response of L-type Ca-current and  $\beta$ -adrenoceptor-adenylate cyclase coupling in rat heart. J. Nutrition, 2000, 130; 733-740.
20. Yılmaz G., Demirel-Yılmaz E., Turan B. Disulfonic stilbene prevents selenite-induced cataract in rat pup lens. Biol. Trace Elem. Res. 2000, 75; 129-138
21. Turan B., Bayarı S., Balçık C., Severcan F., Akkaş N. A biomechanical and spectroscopic study of bone from rats with selenium deficiency and toxicity. Biometals. 2000, 13; 113-121.
22. Yılmaz G., Turan B., Çelebi N., Yılmaz N., Demirel-Yılmaz E. Prevention of selenite-induced opacification and biochemical changes in the rat pup lens through amiloride pretreatment. Current Eye Res. 2000, 20(6); 454-461.
23. Severcan F., Toyran N., Kaptan N., Turan B. Fourier Transform Infrared study of the effect of diabetes on rat liver and heart Tissues in the C-H region. Talanta, 2000, 53; 55-59.
24. Ugur M., Turan B. Adenosine triphosphate alters the selenite-induced contracture and negative inotropic effect on cardiac muscle contractions. Biol. Trace Elem. Res. 2001, 79(3); 235-245.
25. Turan B., Acan N.L., Ulusu, N.N., Tezcan E.F. A comparative study on effect of dietary selenium on some antioxidant enzyme activities of liver and brain tissues. Biol. Trace Elem. Res. 2001;81:141-152.
26. Ugur M., Ayaz M., Ozdemir S., Turan B. Toxic concentration of Selenite shortens repolarization phase of action potential in rat papillary muscle. Biological Trace Element Research, 2002; 89(3): 227-38.
27. Ayaz M., Can B., Ozdemir S., Turan B. Protective effect of selenium treatment on diabetes-induced myocardial structural alterations. Biological Trace Element Research, 89(3): 215-226, 2002.
28. Ulusu N.N., Acan N.L., Turan B., Tezcan E.F. Inhibition of glutathione reductase by cadmium in some rabbit tissues and the protective role of dietary selenium. Biol. Trace Elem. Res. 91(2); 151-156, 2003.
29. Turan B. Zinc-induced changes in ionic currents of cardiomyocytes. Biol. Trace Element Res. 94(1); 49-60, 2003.

30. Severcan F., Kaptan N., Turan B. Fourier transform infrared spectroscopic studies of diabetic rat heart crude membranes. *Spectroscopy*, 17; 569-577, 2003.
31. Boyar H., Turan B., Severcan F. FTIR spectroscopic investigation of mineral structure of streptozotocin induced diabetic rat femur and tibia. *Spectroscopy*, 17; 627-633, 2003.
32. Ozdemir S., Ayaz M., Tuncer T., Ugur M., Turan B. Vegetable Oils used as Vitamin E vehicle effects the Electrical Activity of Rat Heart. *Physiological Research*, 52 (4); 767-771, 2003.
33. Ersöz G., Yakaryilmaz A., Turan B. Effect of antioxidant treatment on platelet aggregation of streptozotocin-induced diabetic rats. *Thrombosis Research*, 111(6); 363-367, 2003.
34. Turan B., Can B., Delilbasi E. Selenium combined with vitamin E and vitamin C restores structural alterations of bones in heparin-induced osteoporosis. *Clin. Rheumatol.* 22(6); 432- 436, 2003.
35. Turan B., Zaloglu N., Saran Y., Konukseven E., Koc E. Alterations in zinc status and tissue structures of heparin-induced osteoporotic rabbits. *Trace Elem. Electrolytes*. 21 (1); 33-40, 2004.
36. Ayaz M., Ozdemir S., Ugur M., Vassort G., Turan B. Effects of Selenium on altered mechanical and electrical cardiac activities of diabetic rat. *Arch. Biochem. Biophys.*, 426, 83-90: 2004.
37. Yaras N., Turan B. Interpretation of relevance of sodium-calcium exchange in action potential of diabetic rat heart by mathematical model. *Mol. Cell. Biochem.* 2005, 269: 121-129.
38. Ozdemir S., Ugur M., Gürdal H., Turan B. Treatment with AT(1) receptor blocker restores diabetes-induced alterations in intracellular Ca<sup>2+</sup> transients and contractile function of rat myocardium. *Arch. Biochem. Biophys.* 435(1):166-74, 2005.
39. Zhang M., Xu Y-J., Saini H. K., Turan B., Liu PP, Dhalla N. S. TNF-□ as a potential mediator of cardiac dysfunction due to intracellular Ca<sup>2+</sup>-overload. *Biophysical Biochemical Research Communications*. 327(1), 57-63, 2005.
40. Ayaz M., Ozdemir S., Yaras N., Vassort G., Turan B. Selenium-induced alterations in ionic currents of cardiomyocytes. *Biophysical Biochemical Research Communications*. 327, 163-173, 2005.
41. Ulusu N.N., Turan B. Beneficial effects of Selenium on some enzymes of diabetic rat heart. *Biol Trace Elem. Res.* 103 (3): 207-216, 2005.
42. Can B., Ulusu N.N., Acan N.L., Saran Y., Turan B. Selenium treatment protects diabetes-induced biochemical and ultrastructural alterations in liver tissue. *Biol Trace Elem. Res.* 105(1-3): 135-50, 2005.
43. Ozdemir S., Ayaz M., Can B., Turan B. Ultrastructural Alteration of Experimental Diabetic Rat Bone and its Improvement by Selenite Treatment. *Biol. Trace Elem. Res.* 107, 167-179, 2005.
44. Yaras N, Ugur M, Ozdemir S, Gurdal H, Purali N, Lacampagne A, Vassort G, Turan B. Effects of diabetes on ryanodine receptor Ca release channel (RyR2) and Ca<sup>2+</sup> homeostasis in rat heart. *Diabetes*, 2005 Nov;54(11):3082-8.
45. Turan B, Saini HK, Zhang M, Prajapati D, Elimban V, Dhalla NS. Selenium improves cardiac function by attenuating the activation of NF-kappaB due to ischemia-reperfusion injury. *Antioxid Redox Signal*. 2005 Sep-Oct;7(9-10):1388-97.
46. Zhang M, Xu YJ, Saini HK, Turan B, Liu PP, Dhalla NS. Pentoxyfylline attenuates cardiac dysfunction and reduces TNF-alpha level in ischemic-reperfused heart. *Am J Physiol*

Heart Circ Physiol. 2005 Aug;289(2):H832-9. Epub 2005 Apr 15.

47. Toyran N, Lasch P, Naumann D, Turan B, Severcan F. Early alterations in myocardia and vessels of the diabetic rat heart: an FTIR microspectroscopic study. Biochem J. Aug 1;397 (3):427-36, 2006.
48. Ayaz M, Turan B. Selenium Prevents Diabetes-Induced Alterations in [Zn 2+] i and Metallothionein Level of Rat Heart via Restoration of Cell Redox Cycle. Am. J. Physiol., (Heart and Circ. Physiol.), 290, H1071-80, 2006.
49. Ayaz M, Celik HA, Aydin HH, Turan B. Sodium selenite protects against diabetes-induced alterations in the antioxidant defense system of the liver. Diabetes Metab Res Rev. Jul-Aug; 22 (4):295-9, 2006.
50. Yaras N., Bilginoglu A., Vassort G., Turan B. Restoration of Diabetes-Induced Abnormal Local Ca<sup>2+</sup> Release in Cardiomyocytes by Angiotensin II Receptor Blockade. Am J Physiol Heart Circ Physiol. 2007 Feb;292(2):H912-20. Epub 2006 Sep 29.
51. Toyran N, Turan B, Severcan F. Selenium alters the lipid content and protein profile of rat heart: An FTIR microspectroscopic study. Arc. Biochem. Biophys. 2007 Feb 15;458(2):184-93. Epub 2007 Jan 22.
52. Bilginoglu A., Amber Cicek F., Ugur M., Gurdal H., Turan B. The role of gender differences in  $\alpha$ -adrenergic receptor responsiveness of normal and diabetic rat hearts. Mol Cell Biochem. 2007 Nov;305(1-2):63-9. Epub 2007 Jun 19.
53. Tuncay E., Segmen A. A., Tanriverdi E., Yaras N., Tandogan B., Ulusu N. N., Turan B. Gender related differential effects of omega-3E treatment on diabetes-induced left ventricular dysfunction. Mol Cell Biochem. 2007 Oct;304(1-2):255-63. Epub 2007 May 26.
54. Buluc M, Ayaz M, Turan B, Demirel-Yilmaz E. Resveratrol-induced depression of the mechanical and electrical activities of the rat heart is reversed by glyburide: evidence for possible K(ATP) channels activation. Arch Pharm Res. 2007 May;30(5):603-7.
55. Toyran N, Severcan F, Severcan M, Turan B. Investigation of diabetes-induced effect on apex of rat heart myocardium by using cluster analysis and neural network approach: An FTIR study. Spectroscopy, 2007, 21: 269-278.
56. Yaras N., Tuncay E., Puralı N., Sahinoglu B., Vassort G., Turan B. Sex-related effects on diabetes-induced alterations in calcium release in the rat heart. Am J Physiol Heart Circ Physiol. 2007 Dec; 293(6):H3584-92. Epub 2007 Sep 21.
57. Toyran N, Severcan F., Severcan M., Turan B. Effects Of Selenium Supplementation On Rat Heart Apex And Right Ventricle Myocardia By Using FTIR Spectroscopy: A Cluster Analysis And Neural Network Approach. Food Chemistry, 2008, 110(3): 590-597.
58. Aydemir-Koksoy A. Turan B. Selenium Inhibits Proliferation Signaling and Restores Sodium/Potassium Pump Function of Diabetic Rat Aorta. Biol Trace Elem Res. 2008, 126: 237-245. Aug 14. [Epub ahead of print]
59. Yaras N, Sarahmetoglu M, Bilginoglu A, Aydemir-Koksoy A, Onay-Besikci A, Turan B, Schulz R. Protective action of doxycycline against diabetic cardiomyopathy in rats. Br J Pharmacol. 2008 Dec;155(8):1174-84. Epub 2008 Sep 22.
60. Ozdemir S, Tandogan B, Ulusu NN, Turan B. Angiotensin II receptor blockage prevents diabetes-induced oxidative damage in rat heart. Folia Biol (Praha). 2009; 55(1):11-6
61. Tuncay E, Seymen AA, Sam P, Gurdal H, Turan B. Effects of Beta-Adrenergic Receptor Blockers on Cardiac Function: A Comparative Study in Male Versus Female Rats. Can J Physiol Pharmacol, 2009, 87: 310-317.
62. Bilginoglu A, Seymen A, Tuncay E, Zeydanli E, Koksoy A, Turan B. Antioxidants but not Doxycycline Treatment Restore Depressed Beta-Adrenergic Responses of the Heart in Diabetic Rats. Cardiovasc. Tox. 2009, 9: 21-29.

63. Zeydanli E N, Turan B. Omega-3E treatment regulates matrix metalloproteinases and prevents vascular reactivity alterations in diabetic rat aorta. *Can J Physiol. Pharmacol.* 2009 Dec;87(12):1063-73.
64. Aydemir-Koksoy A, Bilginoglu A, Sarıahmetoglu M, Schulz R, Turan B. Antioxidants Protect Diabetic Rats from Cardiac Dysfunction by Preserving Contractile Protein Targets of Oxidative Stress. *J. Nutr. Biochem.*, 2010, 21(9): 827-833.
65. Zeydanli EN, Bilginoglu A, Tanrıverdi E, Gurdal H, Turan B. Selenium restores defective beta-adrenergic receptor response of thoracic aorta in diabetic rats. *Mol. Cell. Biochem.* 2010 May; 338(1-2):191-201. Epub 2009 Dec 18.
66. Basgut B, Kayki G, Bartosova L, Ozakca I, Seymen A, Kandilci HB, Ugur M, Turan B, Ozcelikay AT. Cardioprotective effects of 44Bu, a newly synthesized compound, in rat heart subjected to ischemia/reperfusion injury. *Eur J Pharmacol.* 2010 Aug 25;640(1-3):117-23
67. Vassort G, Turan B. Protective role of antioxidants in diabetes-induced cardiac dysfunction. *Cardiovasc Toxicol.* 2010 Jun;10(2):73-86.
68. Turan B: Role of Antioxidants in Redox Regulation of Diabetic Cardiovascular Complications. *Current Pharmaceutical Biotechnology*, 2010, 11(8):819-36.
69. Gecer A, Yıldız N, Turan B, Calimli A. Trimethyl nanochitosan enhances dissolution properties of the poorly water soluble drug candesartan-cilexetil. *Macromolecular Research*, 18(10): 986-991, 2010.
70. Tuncay E, Bilginoglu A, Sozmen NN, Zeydanli EN, Ugur M, Vassort G, Turan B: Intracellular free zinc during cardiac excitation-contraction coupling: calcium and redox dependencies. *Cardiovasc. Res.* 89(3):634-42, 2011.
71. Turan B, Vassort G: Ryanodine receptor: a new therapeutic target to control diabetic cardiomyopathy. *Antiox. Redox Sig. Focused issue*, 2011 Oct 1;15(7):1847-61. Epub 2011 Apr 8.
72. Atalay M, Bilginoglu A, Kokkola T, Oksala N, Turan B. Treatments with sodium selenate or doxycycline offset diabetes-induced perturbations of thioredoxin-1 levels and antioxidant capacity. *Mol Cell Biochem.* 351: 125-131, 2011.
73. Kandilci HB, Tuncay E, Zeydanli EN, Sozmen NN, Turan B. Age-related regulation of excitation-contraction coupling in rat heart. *J Physiol Biochem.* 2011, Sep;67(3):317-30. Epub 2011 Feb 2.
74. Zeydanli EN, Kandilci HB, Turan B. Doxycycline ameliorates diabetic vascular endothelial and contractile dysfunction in thoracic aorta. *Cardiovasc. Toxicol.* 2011, 11(2): 134-147.
75. Sozmen NN, Tuncay E, Zeydanli EN, Turan B. Profound cardioprotection with timolol in female rat model of aging-related altered left ventricular function. *Can. J. Physiol. Pharmacol.* 2011, 89(4): 277-288.
76. Tuncay E, Zeydanli EN, Turan B. Cardioprotective effect of propranolol on diabetes-induced altered intracellular Ca<sup>2+</sup> signaling in rat. *J Bioenerg Biomembr.* 2011, Dec;43(6):747-56. Epub 2011 Nov 30.
77. Turan B, Vassort G. Vitamin E in Oxidant Stress-Related Cardiovascular Pathologies: Focus on Experimental Studies. *Current Pharmaceutical Design*, 2011, 17(21):2155-69
78. Turan B, Tuncay E, Vassort G. Resveratrol and diabetic cardiac function: focus on recent in vitro and in vivo studies. *J Bioenerg Biomembr.* 2012 Apr;44(2):281-96.
79. Bilginoglu A, Kandilci HB, Turan B. Intracellular Levels of Na(+) and TTX-sensitive Na(+) Channel Current in Diabetic Rat Ventricular Cardiomyocytes. *Cardiovasc Toxicol.* 2013 Jun;13(2):138-47. doi: 10.1007/s12012-012-9192-9.

80. Cicek FA, Kandilci HB, Turan B. Role of ROCK upregulation in endothelial and smooth muscle vascular functions in diabetic rat aorta. *Cardiovasc Diabetol.* 2013 Mar 27;12:51. doi:10.1186/1475-2840-12-51.
81. Yildirim SS, Akman D, Catalucci D, Turan B. Relationship Between Downregulation of miRNAs and Increase of Oxidative Stress in the Development of Diabetic Cardiac Dysfunction: Junctin as a Target Protein of miR-1. *Cell Biochem Biophys.* December 2013, Volume 67, Issue 3, pp 1397-1408.
82. Tuncay E, Okatan EN, Vassort G, Turan B:  $\beta$ -blocker timolol prevents arrhythmogenic Ca 2+ release and normalizes Ca 2+ and Zn 2+ dyshomeostasis in hyperglycemic rat heart. *PLOS ONE*, 2013: Jul 29;8(7):e71014. doi: 10.1371
83. Okatan EN, Tuncay E, Turan B. Cardioprotective effect of selenium via modulation of cardiac ryanodine receptor calcium release channels in diabetic rat cardiomyocytes through thioredoxin system. *J Nutr Biochem.* 2013 Dec;24(12): 2110-8.doi:10.1016/j.jnutbio.2013.08.002. Epub 2013 Oct 31.
84. Ozcinar E, Okatan EN, Tuncay E, Eryilmaz S, Turan B. Improvement of functional recovery of donor heart following cold static storage with doxycycline cardioplegia. *Cardiovasc Toxicol.* 2014 Mar;14(1):64-73. doi: 10.1007/s12012-013-9231-1
85. Sargin AK, Can B, Turan B: Comparative Investigation of Kidney Mesangial Cells from Increased Oxidative Stress Induced Diabetic Rats by Using Different Microscopy Techniques, *Mol Cell Biochem.* 2014 May;390(1-2):41-9. doi: 10.1007/s11010-013-1953-7. Epub 2013 Dec 29.
86. Gokturk H, Ulusu NN, Gok M, Tuncay E, Can B, Turan B. Long-term treatment with a beta-blocker timolol attenuates renal-damage in diabetic rats via enhancing kidney antioxidant-defense system. *Mol Cell Biochem.* 2014 Oct;395(1-2):177-86. doi: 10.1007/s11010-014-2123-2. Epub 2014 Jun 20.
87. Amber CF, Zeynep TK, Ozcinar E, Yusuf B, Can AK, Turan B. Di-peptidyl peptidase-4 inhibitor sitagliptin protects vascular function in metabolic syndrome: possible role of epigenetic regulation. *Mol Biol Rep.* 2014 Aug;41(8):4853-63. doi: 10.1007/s11033-014-3392-2.
88. Tuncay E, Okatan EN, Toy A, Turan B. Enhancement of cellular antioxidant-defence preserves diastolic dysfunction via regulation of both diastolic Zn2+ and Ca2+ and prevention of RyR2-leak in hyperglycemic cardiomyocytes. *Oxid Med Cell Longev.* 2014;2014:290381. doi: 10.1155/2014/290381. Epub 2014 Feb 13.
89. Turan B, Tuncay E. Regulation of cardiac  $\beta$  3 -adrenergic receptors in hyperglycemia. *Indian Journal of Biochemistry and Biophysics*, 2014 Dec;51(6):483-92.
90. Cicek F A, Toy A, Tuncay E, Can B, Turan B. Beta-blocker timolol alleviates hyperglycemia-induced cardiac damage via inhibition of endoplasmic reticulum stress. *Journal of Bioenergetics and Biomembranes*, 2014 Oct; 46(5):377-87.
91. Chabosseau PL, Tuncay E, Meur G , Bellomo EA , Hessels A , Hughes S , Johnson PR, Bugliani M , Marchetti P , Turan B, Lyon AR, Merkx M , Rutter GA . Mitochondrial and ER-targeted eCALWY probes reveal high levels of free Zn2+. *ACS Chem Biol.* 2014 Sep 19;9(9):2111-20.
92. Okatan Esma N., Sule Kizil, Hilal Gokturk, Belgin Can, Belma Turan. High-carbohydrate diet induced myocardial remodeling in rats. *Current research: Cardiology*, 2015: 2(1): 5-10.
93. Okatan Esma N., Erkan Tuncay, Gaye Hafez, Belma Turan. Profiling of cardiac  $\beta$ -adrenoceptor subtypes in left ventricular rat heart with metabolic syndrome: Comparison with streptozotocin-induced diabetic rat. *Can J Physiol Pharmacol.* Can J Physiol Pharmacol. 2015 Jul;93(7):517-25. doi: 10.1139/cjpp-2014-0507.

antioxidant/pro-oxidant properties of zinc or selenium on DNA and protein radical formation via hydrogen peroxide. *Mol Cell Biochem.* 2015 Nov;409(1-2):23-31. doi: 10.1007/s11010-015-2508-x.

95. Tuncay E, Turan B. Intracellular Zn<sup>2+</sup> Increase in Cardiomyocytes Induces both Electrical and Mechanical Dysfunction in Heart via Endogenous Generation of Reactive Nitrogen Species. *Biol Trace Elem Res.* 2016 Feb;169(2):294-302. doi: 10.1007/s12011-015-0423-3.

96. Turan B. A Comparative Summary on Antioxidant-like Actions of Timolol with Other Antioxidants in Diabetic Cardiomyopathy. *Curr Drug Deliv.* 2016;13(3):418-23.

97. Tükel HC, Alptekin Ö, Turan B, Delilbaşı E. Effects of metabolic syndrome on masseter muscle of male Wistar rats. *Eur J Oral Sci. Eur J Oral Sci.* 2015 Dec;123(6):432-8. doi: 10.1111/eos.12226.

98. Billur D, Tuncay E, Okatan EN, Olgar Y, Durak AT, Degirmenci S, Can B, Turan B. Interplay Between Cytosolic Free Zn<sup>2+</sup> and Mitochondrion Morphological Changes in Rat Ventricular Cardiomyocytes. *Biol Trace Elem Res.* 2016 Nov;174(1):177-188.

99. Okatan EN, Durak AT, Turan B. Electrophysiological basis of metabolic-syndrome-induced cardiac dysfunction. *Can J Physiol Pharmacol.* 2016 Oct;94(10):1064-1073. Epub 2016 Apr 12.

100. Tuncay E, Bitirim VC, Durak A, Carrat GRJ, Taylor KM, Rutter GA, Turan B. Hyperglycemia-Induced Changes in ZIP7 and ZnT7 Expression Cause Zn<sup>2+</sup> Release From the Sarco(endo)plasmic Reticulum and Mediate ER Stress in the Heart. *Diabetes.* 2017 May;66(5):1346-1358. doi: 10.2337/db16-1099. Epub 2017 Feb 23.

101. Egea J, Fabregat I, Frapart YM, Ghezzi P, et al. European contribution to the study of ROS: A summary of the findings and prospects for the future from the COST action BM1203 (EU-ROS). *Redox Biol.* 2017 May 18;13:94-162. doi: 10.1016/j.redox.2017.05.007. [Epub ahead of print] Review.

102. Durak A, Olgar Y, Tuncay E, Karaomerlioglu I, Kayki Mutlu G, Arioglu Inan E, Altan VM, Turan B. Onset of Depressed Heart Work is Correlated with the Increased Heart Rate and Shorten QT-Interval in High-Carbohydrate Fed Overweight Rats. *Can J Physiol Pharmacol.* 2017 Nov;95(11):1335-1342. doi: 10.1139/cjpp-2017-0054. Epub 2017 Jul 30.

103. Olgar Y, Ozdemir S, Turan B. Induction of endoplasmic reticulum stress and changes in expression levels of Zn<sup>2+</sup>-transporters in hypertrophic rat heart. *Mol Cell Biochem.* 2018 Mar;440(1-2):209-219. doi: 10.1007/s11010-017-3168-9. Epub 2017 Aug 28.

104. Olgar Y, Celen MC, Yamasan BE, Ozturk N, Turan B, Ozdemir S. Rho-kinase inhibition reverses impaired Ca<sup>2+</sup> handling and associated left ventricular dysfunction in pressure overload-induced cardiac hypertrophy. *Cell Calcium.* 2017 Nov;67:81-90. doi: 10.1016/j.ceca.2017.09.002. Epub 2017 Sep 9.

105. Bitirim CV, Tuncay E, Turan B. Demonstration of subcellular migration of CK2α localization from nucleus to sarco(endo)plasmic reticulum in mammalian cardiomyocytes under hyperglycemia. *Mol Cell Biochem.* 2018 Jun;443(1-2):25-36. doi: 10.1007/s11010-017-3207-6. Epub 2017 Oct 20.

106. Olgar Y, Durak A, Tuncay E, Bitirim C V, Ozcinar E, Inan M B, Tokcaer-Keskin Z, Akcali K C, Akar A R, Turan B. Increased Free Zn<sup>2+</sup> Correlates Induction of Sarco(endo)plasmic Reticulum Stress via Altered Expression Levels of Zn<sup>2+</sup>-transporters in Heart Failure. *J Cell. Mol. Med.* 2018 Mar;22(3):1944-1956. doi: 10.1111/jcmm.13480. Epub 2018 Jan 15.

107. Turan B. and Tuncay E. Impact of Labile Zinc on Heart Function: From Physiology to Pathophysiology. *Int J Mol Sci.* 2017 Nov 12;18(11). pii: E2395. doi: 10.3390/ijms18112395. Review.

108. Tuncay E, Bitirim CV, Olgar Y, Durak A, Rutter GA, Turan B. Zn<sup>2+</sup>-transporters ZIP7 and ZnT7 play important role in progression of cardiac dysfunction via affecting sarco(endo)plasmic reticulum-mitochondria coupling in hyperglycemic cardiomyocytes.

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109. Akat F, Fıçıçılars H, Durak A, Tuncay E, Dursun AD, Topal Çelikkan F, Sabuncuoğlu B, Turan B, Baştug M. Intermittent hypoxia induces beneficial cardiovascular remodeling in left ventricular function of type 1 diabetic rat. *Anatol J Cardiol.* 2018 Apr;19(4):259-266. doi: 10.14744/AnatolJCardiol.2018.00236.
110. Degirmenci S, Olgar Y, Durak A, Tuncay E, Turan B. Cytosolic increased labile Zn<sup>2+</sup> contributes to arrhythmogenic action potentials in left ventricular cardiomyocytes through protein thiol oxidation and cellular ATP depletion. *J Trace Elem Med Biol.* 2018 Jul;48:202-212. doi: 10.1016/j.jtemb.2018.04.014. Epub 2018 Apr 14.
111. Olgar Y, Degirmenci S, Durak A, Billur D, Can B, Mutlu GK, Inan EA, Turan B. Aging related functional and structural changes in the heart and aorta: MitoTEMPO improves aged-cardiovascular performance. *Exp Gerontol.* 2018 Jun 13;110:172-181. doi: 10.1016/j.exger.2018.06.012. [Epub ahead of print].
112. Turan B. A brief overview from the physiological and detrimental roles of zinc-homeostasis via zinc-transporters in the heart. *Biol. Trace Elem. Res.* 2018, Aug 8. doi: 10.1007/s12011-018-1464-1. [Epub ahead of print]
113. Durak A, Olgar Y, Degirmenci S, Akkus E, Tuncay E, Turan B. A SGLT2 inhibitor dapagliflozin suppresses prolonged ventricular-repolarization through augmentation of mitochondrial function in insulin-resistant metabolic syndrome rats. *Cardiovasc Diabetologia,* 2018 Nov 17;17(1):144. doi: 10.1186/s12933-018-0790-0.
114. Tuncay E, Olgar Y, Durak A, Degirmenci D, Bitirim C V, Turan B.  $\beta$  3 -adrenergic receptor activation plays an important role in the depressed myocardial contractility via both elevated levels of cellular free Zn<sup>2+</sup> and reactive nitrogen species. *J. Cellular Physiol.* 2019 Aug;234(8):13370-13386. doi: 10.1002/jcp.28015. Epub 2019 Jan 5..
115. Olgar Y and Turan B. The comparative effect of SGLT2 inhibitor dapagliflozin with insulin on Zn<sup>2+</sup>-transporters in cardiomyocytes from insulin-resistant metabolic syndrome rats. *Can. J. Physiol. Pharmacol.* 2019 Jun;97(6):528-535. doi: 10.1139/cjpp-2018-0466. Epub 2018 Nov 16.
116. Bilginoglu A, Selcuk MFT, Nakkas H, Turan B. Pioglitazone provides beneficial effect in metabolic syndrome rats via affecting intracellular Na<sup>+</sup> Dyshomeostasis. *J Bioenerg Biomembr.* 2018 Oct 25. doi: 10.1007/s10863-018-9776-6. [Epub ahead of print].
117. Okatan E N and Turan B. Role of Phosphodiesterases on Cardiac Dysfunction in High Carbohydrate Diet-Induced Metabolic Syndrome Rats, *Can. J. Physiol. Pharmacol.* 2019 Jul 12. doi: 10.1139/cjpp-2019-0006. [Epub ahead of print]
118. Okatan E N, Olgar Y, Tuncay E, Turan B. Azoramide improves mitochondrial dysfunction in palmitate-induced insulin resistant H9c2 cells, *Mol. Cell. Biochem.* 2019 Jul 20. doi: 10.1007/s11010-019-03590-z. [Epub ahead of print]
119. Olgar Y, Tuncay E, Turan B: Effect of mitochondria-targeting antioxidant MitoTEMPO on cellular free Zn<sup>2+</sup> and Zn<sup>2+</sup>-transporters in insulin-resistant aged rat heart, *Int. J. Mol. Sci.* 2019 Aug 2;20(15). pii: E3783. doi: 10.3390/ijms20153783.
120. Ulusu NN, Gok M, Erman B, Turan B. Effects of Timolol Treatment on Pancreatic Antioxidant Enzymes in Streptozotocin-induced Diabetic Rats: An Experimental and Computational Study. *J Med Biochem.* 2019 May 11;38(3):306-316. doi: 10.2478/jomb-2018-0034. Q4
121. Turan B. A Brief Overview from the Physiological and Detrimental Roles of Zinc Homeostasis via Zinc Transporters in the Heart. *Biol Trace Elem Res.* 2019 Mar;188(1):160-176. doi: 10.1007/s12011-018-1464-1. Epub 2018 Aug 8. Review. Q3
122. Kepenek ES, Ozcinar E, Tuncay E, Akcali KC, Akar AR, Turan B. Differential expression of genes participating in cardiomyocyte electrophysiological remodeling via membrane ionic mechanisms and Ca<sup>2+</sup>-handling in human heart failure. *Mol Cell Biochem.* 2020 Jan;463(1-2):33-44. doi: 10.1007/s11010-019-03626-4. Epub 2019 Sep 13.

123. Makrecka-Kuka M, Liepinsh E, Murray AJ, Lemieux H, Dambrova M, Tepp K, Puurand M, Käämbre T, Han WH, de Goede P, O'Brien KA, Turan B, Tuncay E, Olgar Y, Rolo AP, Palmeira CM, Boardman NT, Wüst RCI, Larsen TS. Altered mitochondrial metabolism in the insulin-resistant heart. *Acta Physiol (Oxf)*. 2020 Mar;228(3):e13430. doi: 10.1111/apha.13430. Epub 2019 Dec 30. Review.
124. Akdas S, Turan B, Durak A, Ayral P A, Yazihan N. The relationship between metabolic syndrome development and tissue trace elements status and inflammatory markers, *Biol. Trace Elem. Res.* 2020 Nov;198(1):16-24. doi: 10.1007/s12011-020-02046-6. Epub 2020 Jan 29.
125. Durak A, Bitirim C V, Turan B. Titin and CK2 are new intracellular targets in acute insulin application associated benefits on electrophysiological parameters of left ventricular cardiomyocytes from insulin resistant metabolic syndrome rats. *Cardiovasc. Drugs Ther.* 2020 (DOI: 10.1007/s10557-020-06969-z).
126. Olgar Y, Tuncay E., Degirmenci S., Billur S, Rimpy Dhingra, Kirshenbaum L, Turan B: Aging-associated increase in SGLT2 disrupts mitochondrial/sarcoplasmic reticulum Ca<sup>2+</sup> homeostasis and promotes cardiac dysfunction, *J. Cell. Mol. Med.*, 2020 May, DOI: 10.1111/jcmm.15483.
127. Olgar Y, Tuncay E, Billur D, Durak A, Ozdemir S, Turan B. Ticagrelor reverses the mitochondrial dysfunction through preventing accumulated autophagosomes-dependent apoptosis and ER stress in insulin-resistant H9c2 myocytes. *Mol Cell Biochem*. 2020, 469:97–107. doi: 10.1007/s11010-020-03731-9. [Epub ahead of print]
128. Andreadou I, Schulz R, Papapetropoulos A, Turan B, Ytrehus K, Ferdinand P, Daiber A, Di Lisa F. The role of mitochondrial reactive oxygen species, NO, and H<sub>2</sub>S in ischemia/reperfusion injury and cardioprotection. *J. Cell. Mol. Med.*, 2020 Jun;24(12):6510-6522. doi: 10.1111/jcmm.15279. Epub 2020 May 8.
129. Aydemir D, Salman N, Karimzadehkhouei M, Alaca B E, Turan B, Ulusu N N. Evaluation of the effects of aging on the aorta stiffness in relation with mineral and trace element levels: An optimized method via custom-built stretcher device, *Biological Trace Element Research*, 2020 Sept. doi.org/10.1007/s12011-020-02380-9.
130. Olgar Y, Billur Deniz, Tuncay E, Turan B: MitoTEMPO provides an antiarrhythmic effect in aged-rats through attenuation of mitochondrial reactive oxygen species. *Exp Gerontol.* 2020 Apr 20:110961. doi: 10.1016/j.exger.2020.110961. [Epub ahead of print]
131. Yazihan N, Akdas S, Olgar Y, Biriken D, Turan B, Ozkaya M T. Olive oil attenuates oxidative damage by improving mitochondrial functions in human keratinocytes, *Journal of Functional Foods*, 2020, 71, 104008.
132. Turan B, Tuncay E. The role of labile Zn<sup>2+</sup> and Zn<sup>2+</sup>-transporters in the pathophysiology of mitochondria dysfunction in cardiomyocytes. *Molecular and Cellular Biochemistry*, 2020, doi.org/10.1007/s11010-020-03964-8
133. Alyu F, Yusuf Olgar, Sinan Degirmenci, Belma Turan, Yusuf Ozturk. Interrelated In Vitro Mechanisms of Sibutramine- Induced Cardiotoxicity. *Cardiovascular Toxicology*, 2020, <https://doi.org/10.1007/s12012-020-09622-1>

## **B. Diğer Indexlere Kayıtlı Hakemli Dergilerde Yayınlanan Makaleler**

1. Turan B., Oral B., Öztekin E., Güner Z. Can ESR be Used as a Diagnostic Tool in Medicine? *Hacettepe Bulletin of Natural Sciences and Engineering*, 11, 75-90, 1982.
2. Turan B. Hematolojik araştırmalarda Elektron Spin Rezonans, Türkiye Bilimsel ve Teknik Araştırma Kurumu Magnetik Rezonans Araştırma Ünitesi 1. Kolloquumu Notları, 67-79, 1982.

İncelenmesi, Journal of Ankara Medical School, 6(4), 271-284, 1984.

4. Yılmaz A., Turan B. A Suitable Mechanism for the Explanation of NMR Spin-Lattice Relaxation Time in Human Serum, Biyokimya Dergisi, XI(3), 33-38, 1986.

5. Delilbaşı E., Yücel E., Turan B., Günhan Ö. Infrared Laserin Sağlıklı Dokulardaki Etkisinin Histopatolojik Olarak İncelenmesi, Otorinolarengoloji ve Stomatoloji Dergisi, 2(1), 53-56, 1988.

6. Turan B., Delilbaşı E., Yücel E., Temizer A., Rann H. S. Near-Infrared Laser Light Has Effects on the Level of Various Metals in Skeletal Muscle: Is it completely Harmless?, Laser in Life Sciences, 3(2), 83-88, 1989.

7. Yavuzer S., Pehlivan F., Yıldırım G., Turan B., Güvener A. Infrared Laser Effects on Experimental Epilepsy Models: Convulsive and Anticonvulsive Effects, Turkish Journal of Research in Medical Sciences, 7(2), 81-84, 1989.

8. Dalay N., Turan B., Saydan N., Şengül Z., Özcan T., Dinçol D., İçli F., Tanalp R Determination of Circulating serum free DNA and magnesium levels in cancer patients, Journal of Ankara Medical School, 12 (4), 331-337, 1990.

9. Yavuzer S., Anadolu R, Turan B., Erdem C. The effects of free radical scavengers and infrared Laser irradiation on wound healing, Journal of Ankara Medical School, 13(4), 295- 305, 1991

10. Turan B., Delilbaşı, E., Dalay N., Afrasyap L., Şengün Z. Therapeutic Selenium Supplementation: Activities of Glutathione Peroxidase and Superoxide Dismutase in Several Rabbit Tissues, Romanian Journal of Biophysics, 2(2), 121-127, 1992.

11. Turan B., Delilbaşı E. The serum selenium and immunoglobulins levels in healthy and cancer cases, Biyokimya Dergisi, XVII(I), 29-39, 1992.

12. Turan B., Delilbaşı E., İşimer A., Dalay N. Distribution of selenium and glutathione peroxidase in rabbits given selenite, Turkish Journal of Medical Research, 10(2), 7176, 1992.

13. Dalay N., Turan B., Koç, E., Delilbaşı E. The Effects of in Vivo Selenium Supplementation on the Amplitude of the Spontaneous Contractions and the Responses to Acetylcoline in Isolated Rabbit Ileum, Neurobiology, 1(1), 83-90, 1993.

14. Turan B., Dalay N., Afrasyap L., Delilbaşı E., Şengün Z., Sayal A., İşimer A. The Effects of Selenium Supplementation on Antioxidative Enzyme Activities and Plasma, Erythrocyte Selenium Levels, Acta Physiologica Hungarica, 81(1), 87-93, 1993.

15. Delilbaşı E., Delilbaşı L., Turan B., Dalay N. The effects of selenium supplementation on wound healing and antioxidant enzyme activities of skin lesion, Turkish Journal of Medical Research, 11(2), 54-58, 1993.

16. Turan B., Yeni Y. N., Günel U., Delilbaşı E., İrfanoğlu B., Akkaş N. Biomechanical Characteristics of Osteoporotic Bones in Rabbits: an Experimental Study, Engineering Systems Design and Analysis, 64-4, 91-95, 1994.

17. Turan B., Balçık C., Delilbaşı E., Akkaş N. Effect of Dietary Selenium and Vitamin E on the Biomechanical Properties of Bones and Skeletal Muscles, Engineering Systems Design and Analysis, Vol.77-5, 113-116, 1996

18. Hotomaroğlu Ö., Turan B. PCSoft program for the acquisition and analysis of voltage-dependent properties of macroscopic calcium channel currents in rat ventricular myocytes.Journal of Ankara Medical School, 20(1), 1-8, 1998.

19. Turan B., Saran Y., Can B., Güven M.C., Sayal A. Effect of high dietary selenium on the ultrastructure of rabbit cardiac muscle cell. Med. Sci. Res., 1999, 27(12); 795-799.

20. Can B., Ugur M., Güven C.M., Saran Y., Turan B. Ultrastructural changes of cardiac cells in streptozotocin-induced diabetic rats, Klinik Laboratuvar Araştırma Dergisi, 2001, 5(3); 87- 92.

21. Ulusu N.N., Acan N.L., Turan B., Tezcan E.F. Effect of cadmium ion on glutathione reductase and glutathione peroxidase activity of rat liver and the relationship with dietary selenium. *Türk Biyokimya dergisi*, 2002, 27(2); 43-46.
22. Delilbasi C., Demiralp S., Turan B. Effects of selenium on the structure of the mandible in experimental diabetics. *J Oral Sci.* 2002, 44(2); 85-90.
23. Koc E., Ayaz M., Saran Y., Turan B. Relationship between structural alterations of ileal smooth muscle and altered responses to acetylcholine in streptozotocin-induced diabetic rats. *Journal of Medical Research*, 2002; 20(2): 65-71.
24. Turan B, Ugur M, Ozdemir S, Yaras N. Altered mechanical and electrical activities of the diabetic heart: Possible use of new therapeutics? *Exp Clin Cardiol.* 2005 Fall; 10(3): 189-195.
25. Zeydanli E N., Turan B. Antioxidant treatments improve diabetes induced endothelium-dependent vascular dysfunction. *Erciyes Medical Journal*, 2009, 31(3): 193-200.
26. Toy A, Tutar M F, Olgar Y, Okatan E N, Değirmenci S, Aksu S, Aydın İ, Bıçakçı E, Doğan M, Gündüz A, Tuncay E, Turan B. Pioglitazonun Metabolik Sendromlu Sıçan Kalp Fonksiyonuna Etkisinin Elektrofizyolojik Yöntemlerle İncelenmesi. Ankara Üniversitesi Tıp Fakültesi Mecmuası, 2015, 68(1): 01-08, DOI: 10.1501/Tipfak\_000000881.
27. Durak A, Olgar Y, Değirmenci S, Ertürk N, Akbaş M T, Aygün A, Deniz M C, Erciyas M F, Yazar B T, Yılmaz M S, Erkan Tuncay E, Turan B. SGLT2 İnhibitorü Dapagliflozinin Hiperglisemi-Aracılı Kalp Fonksiyon Bozukluğu Üzerindeki Etkisinin Moleküler Temellerinin: 10.4274/atfm.02996 İncelenmesi. Ankara Üniversitesi Tıp Fakültesi Mecmuası, 2018, 71(3): 131-138.
28. Ulusu NN, Gok N, Erman B, Turan B. Effects of timolol treatment on pancreatic antioxidant enzymes in streptozotocin-induced diabetic rats: An experimental and computational study. *J Med Biochem* 2019 May 11;38(3):306-316. doi: 10.2478/jomb-2018-0034. eCollection 2019 Jul.
29. Koc E, Olgar Y, Turan B: MitoTEMPO increases the gastrointestinal motility in aged rats. *Cyprus J. Medical Sciences*, 2019; DOI: 10512/cjms.2019.47.
30. Teksen F, Ozkan T, Hekmatshoar Y, Turan B: The Expression Levels of Klotho, Endothelial Nitrite Oxide Synthetase and Catalase Genes in Young and Old Heart Tissues of Rats. Ankara Üniversitesi Tıp Fakültesi Mecmuası, 2020;73(3):197-202. DOI: 10.4274/atfm.galenos.2020.07279.

### **C. SCI- Index'e Kayıtlı Dergilerde Yayınlanan Uluslararası Kongre Özetleri**

1. Turan B., Ranu H. S. NMR Studies on Normal and Pathological Human Blood, World Congress on Medical Engineering, 14 th International Conference on Medical and Biological Engineering, and 7.th International Conference on Medical Physics, Espoo, Filland, 11-16 August, 1985, Proceedings in Physics in Medicine and Biology, 31(1), pp.86, 1986.
2. Dalay N., Turan B., Eksinozlugil Z., Saydan N. Serum Free DNA in Cancer: Significance and Proposed Release Mechanism, Third European Congress on Cell Biology, 2-7 September, 1990, Firenze, Italy, Cell Biology International Reports, vol. 14, Abstract Supplement, pp: 176.
3. Turan B., Scamps F., Vassort G. Dual Effects of Extracellular ATPS on INa in Cardiac Cells, Biophysical Society Meeting, February 14- 18, 1993, Washington, USA, Biophysical Journal, 64(2), A396.
4. Turan B., Kızıltan E., Hotomaroğlu Ö., Demirel E., Türker K., Vassort G. Selenite Blocks Contractions of Cardiac and Vascular Smooth Muscle via Voltage Dependent Calcium Channels, International Pharmacology Meeting, July, 1994, Montreal, Canada, Canadian J. Physiol. Pharmacol. 72(1), A182.

5. Turan B., Kızıltan E., Hotomaroğlu Ö., Demirel E., Pehlivan F., Vassort G. Effects of Exogenous Selenite on Atrial Mechanical Function and Endothelium Dependent Relaxation, International Heart Meeting, October, 1994, Germany, European Heart Journal, IS(Suppl.), A97.
6. Turan B., Desilets M. Oxidative Effects of Selenite on Rat Ventricular Contraction and [Ca] i . Thirtyninth Annual Meeting, February 12-16, 1995, San Francisco USA, Biophysical Journal, 68(2), A180, 1995.
7. Vannier C., Chevassus H., Turan B., Vassort G. Selenite-induced Increase in Force of Rat Skinned Cardiomyocytes, The XV. World Congress of the International Society for Heart Research, Prague, Chezch.Repl. 2-7 July, 1995, J. Mol. Cell. Cardiology, 27(6), A110.
8. Turan B., Fliss H., Desilets M. Intracellular Free-Zn<sup>2+</sup> in Ventricular Cardiac Myocytes: Oxidant-Induced Alteration and Effect on ICa, Fortieth Annual Meeting, February 17-21, 1996, Baltimore USA, Biophysical Journal, 70(2), A272.
9. Turan B., Zaloğlu N., Koç E., Öztürk Ö., Saran Y. Dietary selenium-induced Alterations on Physiological Parameters and Histological Changes in Rabbit Tissues, XII. International Biophysics Congress, 11-16 August 1996, Amsterdam, The Netherlands, Progress in Biophysics and Molecular Biology, 1996, 65, Suppl. 1, A206.
10. Turan B., Hotomaroğlu Ö., Demirel-Yılmaz E., Vassort G. Cardiac Dysfunction Induced by Oxidants: Alteration of -adrenergic Stimulation. Experimental Biology'97 Meeting, New Orleans, USA, April 6-9, 1997, Annual Meeting of professional Research Scientists, The FASEB Journal, 11(3), A279, 1997.
11. Turan, B., Balcık, C., Severcan, F., Uğur, M., Bayarı, S., Akkaş, N. A biomechanical and spectroscopic study of bone from rats with selenium deficiency and toxicity. III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 132, 1998.
12. Koç, E., Zaloğlu, N., Konukseven, E., Turan, B., The effects of long term heparin application on Ach-induced isolated ileum contractility and structure. III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 194, 1998.
13. Zaloğlu, N., Koç, E., Saran, Y., Konukseven, E., Turan, B., Heparin-induced histopathological changes in some rabbit tissues, . III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 195, 1998.
14. Saran, Y., Can B., Güven, C., Zaloğlu, N., Koc, E., Turan, B., Long term and overdose heparin-induced changes in rabbit liver tissue. III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 195, 1998.
15. Sayar K., Uğur M., Turan B., Gürdal H., Onaran O. Effect of dietary selenium intake on  $\alpha$ -adrenoceptor-adenylyl cyclase coupling in the membrane of rat heart. XIIth International Congress of Pharmacology, 26-31 July, 1998, München, Germany. Abstract in: Archives of Pharmacology, Supplement 2 to Volume 358 No 1, pp. R591, 1998.
16. Saran Y., Can B., Güven C., Uğur M., Turan B. Effect of high dietary selenium on the ultrastructure of rabbit cardiac muscle cells. 14th International Congress on Electron Microscopy, Cancun, Mexico, 31 August – 4 september, 1998. Abstract in: Electron Microscopy 1998, Volume IV, Biological Sciences, Edt. H A Calderon Benavides and M Jose Yacaman, Institute of Physics Publishing, Bristol and Philadelphia.
17. Turan B., Ayaz M., Tuncer T., Sakinci N., Uğur M. Changes in electrophysiological and mechanical responses of the rat heart to selenite in streptozotocin-induced diabetes. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: Physiological Research, 48 (suppl.1), pp.S131, 1999.

18. Toyran N., Ayaz M., Turan B., Severcan F. Comparison of streptozotocin-induced diabetic and control rat liver tissues by Fourier Transform Infrared Spectroscopy. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.
19. Yücel C.A., Boyar H., Uğur M., Turan B., Severcan F., Akkaş N. Biomechanical and spectroscopic investigations of streptozotocin-induced diabetic rat bones. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.
20. Yücesoy C.A., Boyar H, Uğur M, Turan B, Severcan F and Akkaş N., "Biomechanical and spectroscopic investigations of streptozotocin-induced diabetic rat bones", *Physiological Research*, 48, S131, 1999.
21. Kaptan N., Yazıcı Z., Tuncer T., Turan B., Severcan F. Fourier Transform Infrared Spectroscopy of experimental diabetic rat heart. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.
21. Zaloğlu N., Saran Y., Koc E., Turan B. Heparin-induced alterations in some physiological parameters and ultrastructural changes in rabbit lung tissue. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S115, 1999.
22. Koç E., Saran Y., Turan B. Streptozotocin-induced diabetes alters Ach-induced contraction of isolated rat ileum. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S85, 1999.
23. Belma Turan, Murat Ayaz, Mehmet Uğur. Selenium treatment effects action potential parameters of streptozotocin-induced diabetic cardiomyopathy in rat. Experimental Biology 2000, San Diego, California, USA, April 15-18, 2000. Abstract in: *The FASEB Journal*, 2000, 14(4), A537.
24. Yüksel Saran, Belgin Can, M. Cengiz Güven, Nezahat Zaloğlu, Belma Turan. Ultrastructural changes induced by long term and overdose heparin application in liver tissue. EUREM 2000 12 th European Congress on Electron Microscopy, July 9-14 2000, Brno, Czech Republic. Abstract in: *Biological Sciences*, 2000, Vol. I B269-270.
25. Murat Ayaz, Mehmet Ugur, Belma Turan. Sodium selenite treatment prevents prolongation of the cardiomyocyte action potential in streptozotocin induced diabetes rat. Fouthyfive Annual Meeting, February 12-16, 2001, Boston USA, *Biophysical Journal*, 80(1), A538, 2001.
26. Belma Turan, Murat Ayaz, Semir Ozdemir, Mehmet Ugur, Guy Vassort. Selenite restores diminished K currents in diabetic rat heart. 22 nd European Section meeting of the International Society for Heart Research, 3-6 July, 2002 – Szeged, Hungary. Abstract: *J. Mol. Cell. Cardiol.* 2002, 34(6); A65.
27. N. Nuray Ulusu, K. Kilinc, Belma Turan, N. Leyla Acan. Effect of selenium treatment on glutathione redox system in diabetic rat liver. 28 th meeting of the Federation of European Biochemical Societies. 20-25 October, 2002, Istanbul-Turkey. Abstract in: *EJB The FEBS Journal*, 2002, 269, Supplement 1: pp 88.
28. Turan B., Zhang M., Prajapati D., Elimban V., Dhalla N.S. Selenium protects against myocardial ischemia-reperfusion injury. ISHR meeting, 2-6 June, 2004, Dresden- Germany, Abstract in: *J. Mol. Cell. Cardiol.* 36 (5), 764, 2004.
29. Yaras N., Ayaz M., Ozdemir S., Ugur M., Turan B. Interpretation of relevance of sodium-calcium exchange in action potential of diabetic rat heart by mathematical model. ISHR meeting, 2-6 June, 2004, Dresden- Germany, Abstract in: *J. Mol. Cell. Cardiol.* 36 (5), 765, 2004.

30. Ozdemir S., Ugur M., Gürdal H., Turan B. Candesartan treatment restores diabetes induced alterations in Ca transients and contractile function of rat myocardium. EPHAR 2004 meeting, 14-17 July, 2004, Porto-Portekiz. Abstract in: Fundamental & Clinical Pharmacology, 18, suppl. 1, 2004.
31. Ozdemir S., Ugur M., Gürdal H., Turan B. Candesartan treatment restores diabetes-induced alterations in  $\square$ Ca<sub>2+</sub>  $\square$ i transients cardiomyocytes. The 8 th Annual meeting heart failure Society of America, September 12-15, 2004, Toronto, Canada. Abstract in: J. Cardiac Failure, 10(4): S75, 2004.
32. Turan B. Selenium restores increased intracellular free zinc concentration in streptozotocin-induced diabetic rat cardiomyocytes. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17, 269-270, 2004.
33. Koc E., Turan B. Diltiazem and atropine enhance selenium-induced contractile response in isolated rat ileum. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17, 237, 2004.
34. Zaloglu N., Günal Y., Aydin A., Turan B. Effects of chronic selenium treatment on plasma trace element levels of STZ-induced diabetic rats. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17, 211-212, 2004.
35. Saran Y., Can B., Turan B. Effects of selenium on structural alterations in diabetes-induced brain cortex tissue. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17,
36. Yaras N., Ozdemir S., Ugur M., Gurdal H., Puralı N., Lacampagne A., Vassort G., Turan B. Diabetes-induced alterations in parameters of calcium sparks of cardiomyocytes from rats. 27 th Annual ISHR American Section Meeting, May 12-15, New Orleans, USA, Abstract in: J. Mol. Cell. Cardiol. 38 (5), 816, 2005.
37. Yaras N., Ozdemir S., Ugur M., Gurdal H., Puralı N., Lacampagne A., Vassort G., Turan B. Parameters of calcium sparks are altered in ventricular cardiomyocytes from type 1 diabetic rats. 25 th Annual ISHR European Section Meeting, June 21-55, Tromso, Norway, Abstract in: J. Mol. Cell. Cardiol. 38 (6), 1076-1077, 2005.
38. Toyran N., Turan B., Sevencan F. The role of selenium treatment on diabetes-induced changes I rat heart at the molecular level. 25 th Annual ISHR European Section Meeting, June 21-55, Tromso, Norway, Abstract in: J. Mol. Cell. Cardiol. 38 (6), 1066, 2005.
39. Turan B, Yaras N, Bilginoglu A, Amber F, Ugur M. Sex difference affects Ca<sub>2+</sub> sparks parameters and  $\square$ -adrenergic receptor responses in rat heart. 50 th Annual Meeting of American Biophysical Society, Feb. 18-22, 2006, Salt Lake- USA.
40. Nazmi Yaras, Erkan Tuncay, Nuhan Puralı, Babur Sahinoglu, Guy Vassort, Alain Lacampagne, Belma Turan: Sex Differences Affect Ca 2+ Sparks Parameters In Normal And Diabetic Rat Ventricular Cardiomyocytes, International Societyfor Heart Research, From Cell To Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 109, 2007.
41. Nazmi Yaras, Ayca Bilginoglu, Aslihan Koksoy, Richard Schulz, Belma Turan; Reduced Myocardial Contractile Function In Diabetic Cardiomyopathy—Possible Role Of Matrix Metalloproteinase-2. International Societyfor Heart Research, From Cell to Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 162, 2007.
42. Aslihan Koksoy, Esma Zeydanli, Erim Tanrıverdi, Richard Schulz; Belma Turan: Doxycycline Ameliorates Diabetes-Induced Vascular Dysfunction. International Societyfor Heart Research, FROM CELL TO MAN TO SOCIETY, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 228, 2007.

43. Erkan Tuncay, Ali Aytac Seymen, Evrim Tanrıverdi Nazmi Yaras, Belma Turan; Sex Related Differential Effects Of Omega-3e Treatment On Diabetes-Induced Left Ventricular Dysfunction. International Societyfor Heart Research, From Cell To Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 110, 2007.
44. Meltem Sariahmetoglu, Aslihan Koksoy, Ayca Bilginoglu, Arzu Besikci, Belma Turan, Richard Schulz; Inhibition Of Matrix Metalloproteinases Reduces Streptozotocin-Induced Diabetic Cardiomyopathy. International Societyfor Heart Research, FROM CELL TO MAN TO SOCIETY, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 169, 2007.
45. Ayca Bilginoglu, Figen Amber, Mehmet Ugur, Hakan Gurdal, Belma Turan; Role Of Sex Differences In  $\square$ -Adrenergic Receptor Responsiveness Of Diabetic Rat Heart. International Societyfor Heart Research, From Cell To Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 26, 2007.
46. Esma Nur Zeydanli, Evrim Tanrıverdi, Ali Aytac Seymen, Erkan Tuncay, Hakan Gurdal, Aslihan Koksoy, Belma Turan: Beneficial Effect Of Sodium Selenate On Vascular Dysfunction In Diabetic Rats. International Societyfor Heart Research, FROM CELL TO MAN TO SOCIETY, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 229, 2007.
47. A. Koksoy, M. Sariahmetoglu, A. Onay-Besikci, R. Schulz, B. Turan: Inhibition Of Matrix Metalloproteinase Activity Has Beneficial Effects In Diabetes-Induced Cardiomyopathy. FASEB Meeting, 2007, Washington DC, USA.
48. Bilginoglu A., Seymen A., Tuncay E., Köksüz A., Turan B. Antioxidants but not doxycycline restore depressed beta-adrenergic responses of the heart in diabetic rats. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44(4): 746.
49. Zeydanli EN., Bilginoglu A., Koksoy A., Turan B.: Roles Of Oxidant Stress and Matrix Metalloproteinases in Endothelium-Dependent Relaxation of Diabetic Rat Thoracic Aorta. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44(4): 767-768.
50. Tuncay E., Seymen A., Turan B. Beneficial effects of non-selective beta blockers on mechanical and electrical activities of diabetic rat heart. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44 (4): 775.
51. Seymen A., Tuncay E., Gurdal H., Turan B. Beneficial effects of long-term treatment with beta-adrenergic blocker on depressed heart function of female rats. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44 (4): 816.
52. A. Koksoy, E. Zeydanli, A. Bilginoglu, B. Turan: selenium protects from cardiac dysfunction by preserving contractile protein targets of oxidative stress in diabetic rats. 40th Annual meeting of the American College of Nutrition "Advences in Clinical Nutrition". September 30 – October 02, 2008, Washington DC, USA. Abstract in: J. American College of Nutrition, 2008, 27(5): 621.
53. Erkan Tuncay, Aytac A. Seymen, Belma Turan: Beneficial Effects with Beta-Adrenergic Receptor Blockers on Altered Intracellular Ca<sup>2+</sup> in Diabetic Rat Heart. XXXVI International Congress of Physiological Sciences (IUPS2009) Function of Life: Elements and Integration July 27–August 1, 2009, Kyoto, Japan. Abstract: The Journal of Physiological Sciences, Volume 59 · Supplement 1 · 2009, pp. 124.
54. Esma N. Zeydanli, Erkan Tuncay, Aytac A Seymen, Ayca Bilginoglu, Nazlı Sözen, Mehmet Ugur, Guy Vassort, Belma Turan. Intracellular Zn<sup>2+</sup> release modulates cardiac ryanodine receptor function and cellular activity. Biophysical Society 54th Annual Meeting, February 20-24, 2010, San Francisco, USA.

55- Ayca Bilginoglu, Burak Kandilci, Belma Turan. The effect of insulin on intracellular Na + homeostasis in isolated cardiomyocytes from diabetic rats. International Academy of cardiology, 15 th World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 112, 2010.

56- Belma Turan. Role of ryanodine receptor as a new therapeutic target in diabetic heart dysfunction. International Academy of cardiology, 15 th World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 4, 2010.

57- Belma Turan. Enhancement of antioxidant defence against oxidative stress by timolol-treatment prevents age-/diabetes-related cardiac dysfunction via recovery of intracellular Ca-handling. Proceedings of 5 th Annual meeting of the Diabetes & Cardiovascular Disease: EASD study group, November 15-17, 2012, Paris, France. Diabetes Metabolism & the Heart, Special issue 5, Vol. 38, S107, 2012.

58. E. Tuncay, B. Turan: Activation of  $\beta$  3 -adrenoceptors induces increase in intracellular free Zn 2+ via NO signaling pathway in hyperglycemic cardiomyocytes. Biophysical Society 57 th Annual Meeting, February 2-6, 2013, Philadelphia, USA, Biophysical Journal, Special issue.

59. E. Tuncay, B. Turan: Enhancement of antioxidant defence preserves RyR2 function of hyperglycemic cardiomyocytes via regulation of both intracellular Zn 2+ and Ca 2+ homeostasis. Biophysical Society 57 th Annual Meeting, February 2-6, 2013, Philadelphia, USA, Biophysical Journal, Special issue.

60. E. Tuncay, F. A. Cicek, A. Toy, B. Turan: Intracellular free zinc increase triggers hyperglycemia-induced cardiomyocyte dysfunction through endoplasmic reticulum stress. Biophysical Society 58 th Annual Meeting, February 15-19, 2014, San Francisco, USA, Biophysical Journal, Special issue.

61. E. N. Okatan, A. Toy, B. Turan: Altered intracellular calcium ion regulation plays important role in high carbohydrate intake induced myocardial remodeling. Biophysical Society 58 th Annual Meeting, February 15-19, 2014, San Francisco, USA, Biophysical Journal, Special issue.

62. B. Turan: MicroRNAs: Are new players in cardiac dysfunctions? Proceedings of 5th World congress on Biotechnology, June 25-27, 2014, Valencia, Spain. Journal of Biotechnology and Biomaterials, June 2014, vo. 3 (5), pp. 128,

63. Erkan Tuncay, AysegulToy, Belma Turan: Association between  $\beta$ 3-adrenoceptor activation and intracellular free zinc ion increase contributes to hyperglycemia-induced cardiac ER-stress. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 433a

64. Aysegül Durak, Yusuf Olgar, Sinan Degirmenci, Erkan Tuncay, Belma Turan: An Investigation on Electrical Activity and Sarcolemmal KD-Channels in Cardiomyocytes from Insulin-Resistant Rat Heart. 60th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 272a

65. Yusuf Olgar, Erkan Tuncay, Belma Turan: Age-related changes in electrical activities and microRNAs of left ventricular cardiomyocytes isolated from rat heart. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 587a.

66. Sinan Degirmenci, Yusuf Olgar, Aysegül Toy, Belma Turan: Both Hyperglycemia and Hyperinsulinemia Induce Changes in Voltage-Dependent KD Channel Currents in H9c2 Ventricular Cells. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 273a.

67. Erkan Tuncay, Verda C. Bitirim, Aysegul Toy, Zeynep Tokcaer-Keskin, Kamil C. Akcali, Guy A. Rutter, Belma Turan: Role of ZIP7 in regulation of cytosolic free Zn<sup>2+</sup> level in mammalian cardiomyocytes: 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 588a.

68. Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Verda C. Bitirim, Evren Ozcinar, Mustafa Bahadir Inan, Kamil Can Akcali, Semir Ozdemir, Ahmet Ruchan Akar, Belma Turan. Role of www.lokmanhekim.edu.tr info@lokmanhekim.edu.tr

zinc transporters in mammalian heart under physiological and pathological conditions. Biophysical Society 61 st Annual meeting, New Orleans, February 11-15, 2017, USA. Abstract in: Biophysical Journal, Volume 112, Issue 3, Suppl. 1.

69. Yusuf Olgar, Aysegul Durak, Erkan Tuncay, Semir Ozdemir, Belma Turan. The Zn 2+ transporters in hypertrophied rat heart. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.

70. Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Ceylan Verda Bitirim, Mustafa Bahadir Inan, Kamil Can Akcali, Ahmet Ruchan Akar, Belma Turan. Expression levels of zinc transporters in human failing heart. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.

71. Sinan Değirmenci, Yusuf Olgar, Erkan Tuncay, Belma Turan. Increased cytosolic free Zn 2+ alters action potential parameters via activation of KATP-channels in rat ventricular cardiomyocytes. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.

72. Erkan Tuncay, Verda C. Bitirim, Yusuf Olgar, Aysegul Durak, Guy A. Rutter, Belma Turan. Mitochondrial localization and function of Zn 2+ -transporters ZIP7 and ZnT7 in mammalian heart. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.

73. Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Belma Turan.  $\beta$ 3-adrenergic receptor regulation of cardiac ion channels in overweight insulin resistant rats. Biophysical Society 62 nd Annual meeting, San Francisco, February 17-21, 2018, USA. Abstract in: Biophysical Journal, Volume 114, Issue 3, Supplement 1, PP: 304a.

74. Belma Turan, Yusuf Olgar, Erkan Tuncay. Inhibititon of Protein Kinase G Preserves Prolonged Ventricular Action Potentialsvia Improvement of Slow-Activated Voltage-Dependent K+-Channel Currents in Aged Rat Cardiomyocytes. Abstract in: Biophysical Society 63 rd Annual meeting, Baltimore, March 02-06, 2019, USA. Abstract in: Biophysical Journal, Volume 116, Issue 3, Supplement 1, PP: 98a.

75. Erkan Tuncay, Hua-Qian Yang, Ivan Gando, Belma Turan, Ravichandran Ramasamy, William A Coetze. Sirtuins Positively Regulate K ATP Channels, Which Contributes to their Cardioprotective Role, in Biophysical Society 63 rd Annual meeting, Baltimore, March 02-06, 2019, USA. Abstract in: Biophysical Journal, Volume 116, Issue 3, Supplement 1, PP: 250a.

#### D.Uluslararası bilimsel toplantılarda sunulan ve bildiri kitaplarında (proceedings) basılan bildiriler:

1. Turan B., Ranu H. S. NMR Studies on Normal and Pathological Human Blood, World Congress on Medical Engineering, 14 th International Conference on Medical and BiologicalEngineering, and 7.th International Conference on Medical Physics, Espoo, Filland, 11-16August, 1985, Proceedings in Physics in Medicine and Biology, 31(1), pp.86, 1986.
2. Dalay N., Turan B., Eksinozlugil Z., Saydan N. Serum Free DNA in Cancer: Significance and Proposed Release Mechanism, Third European Congress on Cell Biology, 2-7 September, 1990, Firenze, Italy, Cell Biology International Reports, vol. 14, Abstract Supplement, pp: 176.
3. Turan B., Scamps F., Vassort G. Dual Effects of Extracellular ATPS on INa in Cardiac Cells, Biophysical Society Meeting, February 14- 18, 1993, Washington, USA, Biophysical Journal, 64(2), A396.
4. Turan B., Kızıltan E., Hotomaroğlu Ö., Demirel E., Türker K., Vassort G. Selenite Blocks Contractions of Cardiac and Vascular Smooth Muscle via Voltage Dependent Calcium Channels, International Pharmacology Meeting, July, 1994, Montreal, Canada, Canadian J.

Physiol. Pharmacol. 72(1), A182.

5. Turan B., Kızıltan E., Hotomaroğlu Ö., Demirel E., Pehlivan F., Vassort G. Effects of Exogenous Selenite on Atrial Mechanical Function and Endothelium Dependent Relaxation, International Heart Meeting, October, 1994, Germany, European Heart Journal, IS(Suppl.), A97.
6. Turan B., Desilets M. Oxidative Effects of Selenite on Rat Ventricular Contraction and [Ca]<sup>2+</sup>. Thirtyninth Annual Meeting, February 12-16, 1995, San Francisco USA, Biophysical Journal, 68(2), A180, 1995.
7. Vannier C., Chevassus H., Turan B., Vassort G. Selenite-induced Increase in Force of Rat Skinned Cardiomyocytes, The XV. World Congress of the International Society for Heart Research, Prague, Chezch.Repl. 2-7 July, 1995, J. Mol. Cell. Cardiology, 27(6), A110.
8. Turan B., Fliss H., Desilets M. Intracellular Free-Zn<sup>2+</sup> in Ventricular Cardiac Myocytes: Oxidant-Induced Alteration and Effect on ICa, Fortieth Annual Meeting, February 17-21, 1996, Baltimore USA, Biophysical Journal, 70(2), A272.
9. Turan B., Zaloğlu N., Koç E., Öztürk Ö., Saran Y. Dietary selenium-induced Alterations on Physiological Parameters and Histological Changes in Rabbit Tissues, XII. International Biophysics Congress, 11-16 August 1996, Amsterdam, The Netherlands, Progress in Biophysics and Molecular Biology, 1996, 65, Suppl. 1, A206.
10. Turan B., Hotomaroğlu Ö., Demirel-Yılmaz E., Vassort G. Cardiac Dysfunction Induced by Oxidants: Alteration of -adrenergic Stimulation. Experimental Biology'97 Meeting, New Orleans, USA, April 6-9, 1997, Annual Meeting of professional Research Scientists, The FASEB Journal, 11(3), A279, 1997.
11. Turan, B., Balcık, C., Severcan, F., Uğur, M., Bayarı, S., Akkaş, N. A biomechanical and spectroscopic study of bone from rats with selenium deficiency and toxicity. III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 132, 1998.
12. Koç, E., Zaloğlu, N., Konukseven, E., Turan, B., The effects of long term heparin application on Ach-induced isolated ileum contractility and structure. III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 194, 1998.
13. Zaloğlu, N., Koç, E., Saran, Y., Konukseven, E., Turan, B., Heparin-induced histopathological changes in some rabbit tissues, . III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 195, 1998.
14. Saran, Y., Can B., Güven, C., Zaloğlu, N., Koc, E., Turan, B., Long term and overdose heparin-induced changes in rabbit liver tissue. III. International Congress of Pathophysiology, Lahti, Finland, June 28-July 3, 1998, Abstract in: The offical Journal of the International Society for Pathophysiology, Vol. 5 (supplement 1), pp. 195, 1998.
15. Sayar K., Uğur M., Turan B., Gündal H., Onaran O. Effect of dietary selenium intake on □-adrenoceptor-adenylyl cyclase coupling in the membrane of rat heart. XIIIth International Congress of Pharmacology, 26-31 July, 1998, München, Germany. Abstract in: Archives of Pharmacology, Supplement 2 to Volume 358 No 1, pp. R591, 1998.
16. Saran Y., Can B., Güven C., Uğur M., Turan B. Effect of high dietary selenium on the ultrastructure of rabbit cardiac muscle cells. 14th International Congress on Electron Microscopy, Cancun, Mexico, 31 August – 4 september, 1998. Abstract in: Electron Microscopy 1998, Volume IV, Biological Sciences, Edt. H A Calderon Benavides and M Jose Yacaman, Institute of Physics Publishing, Bristol and Philadelphia.
17. Turan B., Ayaz M., Tuncer T., Sakinci N., Uğur M. Changes in electrophysiological and mechanical responses of the rat heart to selenite in streptozotocin-induced diabetes. 2 nd

Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.

18. Toyran N., Ayaz M., Turan B., Severcan F. Comparison of streptozotocin-induced diabetic and control rat liver tissues by Fourier Transform Infrared Spectroscopy. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.
19. Yücel C.A., Boyar H., Uğur M., Turan B., Severcan F., Akkaş N. Biomechanical and spectroscopical investigations of streptozotocin-induced diabetic rat bones. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.
20. Yücesoy C.A., Boyar H, Uğur M, Turan B, Severcan F and Akkaş N., "Biomechanical and spectroscopical investigations of streptozotocin-induced diabetic rat bones", *Physiological Research*, 48, S131, 1999.
21. Kaptan N., Yazıcı Z., Tuncer T., Turan B., Severcan F. Fourier Transform Infrared Spectroscopy of experimental diabetic rat heart. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S131, 1999.
22. Zaloğlu N., Saran Y., Koc E., Turan B. Heparin-induced alterations in some physiological parameters and ultrastructural changes in rabbit lung tissue. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 (suppl.1), pp.S115, 1999.
23. Koç E., Saran Y., Turan B. Streptozotocin-induced diabetes alters Ach-induced contraction of isolated rat ileum. 2 nd Federation of European Physiological Society (FEPS) Congress, 29 June-4 July, 1999, Prague, Czech Republic. Abstract in: *Physiological Research*, 48 suppl.1), pp.S85, 1999.
24. Belma Turan, Murat Ayaz, Mehmet Uğur. Selenium treatment effects action potential parameters of streptozotocin-induced diabetic cardiomyopathy in rat. *Experimental Biology* 2000, San Diego, California, USA, April 15-18, 2000. Abstract in: *The FASEB Journal*, 2000, 14(4), A537.
25. Yüksel Saran, Belgin Can, M. Cengiz Güven, Nezahat Zaloğlu, Belma Turan. Ultrastructural changes induced by long term and overdose heparin application in liver tissue. EUREM 2000 12 th European Congress on Electron Microscopy, July 9-14 2000, Brno, Czech Republic. Abstract in: *Biological Sciences*, 2000, Vol. I B269-270.
26. Murat Ayaz, Mehmet Ugur, Belma Turan. Sodium selenite treatment prevents prolongation of the cardiomyocyte action potential in streptozotocin induced diabetes rat. Fouthyfive Annual Meeting, February 12-16, 2001, Boston USA, *Biophysical Journal*, 80(1), A538, 2001.
27. Belma Turan, Murat Ayaz, Semir Ozdemir, Mehmet Ugur, Guy Vassort. Selenite restores diminished K currents in diabetic rat heart. 22 nd European Section meeting of the International Society for Heart Research, 3-6 July, 2002 – Szeged, Hungary. Abstract: *J. Mol. Cell. Cardiol.* 2002, 34(6); A65.
28. N. Nuray Ulusu, K. Kilinc, Belma Turan, N. Leyla Acan. Effect of selenium treatment on glutathione redox system in diabetic rat liver. 28 th meeting of the Federation of European Biochemical Societies. 20-25 October, 2002, Istanbul-Turkey. Abstract in: *EJB The FEBS Journal*, 2002, 269, Supplement 1: pp 88.
29. Turan B., Zhang M., Prajapati D., Elimban V., Dhalla N.S. Selenium protects against myocardial ischemia-reperfusion injury. ISHR meeting, 2-6 June, 2004, Dresden- Germany, Abstract in: *J. Mol. Cell. Cardiol.* 36 (5), 764, 2004.
30. Yaras N., Ayaz M., Ozdemir S., Ugur M., Turan B. Interpretation of relevance of sodium-calcium exchange in action potential of diabetic rat heart by mathematical model. ISHR meeting, 2-6 June, 2004, Dresden- Germany, Abstract in: *J. Mol. Cell. Cardiol.* 36 (5), 765,

2004.

31. Ozdemir S., Ugur M., Gürdal H., Turan B. Candesartan treatment restores diabetes induced alterations in Ca transients and contractile function of rat myocardium. EPHAR 2004 meeting, 14-17 July, 2004, Porto-Portekiz. Abstract in: Fundamental & Clinical Pharmacology, 18, suppl. 1, 2004.
32. Ozdemir S., Ugur M., Gürdal H., Turan B. Candesartan treatment restores diabetes-induced alterations in  $\square\text{Ca}^{2+}$   $\square\text{i}$  transients cardiomyocytes. The 8 th Annual meeting heart failure Society of America, September 12-15, 2004, Toronto, Canada. Abstract in: J. Cardiac Failure, 10(4): S75, 2004
33. Turan B. Selenium restores increased intracellular free zinc concentration in streptozotocin-induced diabetic rat cardiomyocytes. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17, 269-270, 2004.
34. Koc E., Turan B. Diltiazem and atropine enhance selenium-induced contractile response in isolated rat ileum. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17, 237, 2004.
35. Zaloglu N., Günal Y., Aydin A., Turan B. Effects of chronic selenium treatment on plasma trace element levels of STZ-induced diabetic rats. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17, 211-212, 2004.
36. Saran Y., Can B., Turan B. Effects of selenium on structural alterations in diabetes-induced brain cortex tissue. ISTERH 7 th International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand. Abstract in: The Journal of Trace Elem. In Exp. Med. 17,
37. Yaras N., Ozdemir S., Ugur M., Gurdal H., Puralı N., Lacampagne A., Vassort G., Turan B. Diabetes-induced alterations in parameters of calcium sparks of cardiomyocytes from rats. 27 th Annual ISHR American Section Meeting, May 12-15, New Orleans, USA, Abstract in: J. Mol. Cell. Cardiol. 38 (5), 816, 2005.
38. Yaras N., Ozdemir S., Ugur M., Gurdal H., Puralı N., Lacampagne A., Vassort G., Turan B. Parameters of calcium sparks are altered in ventricular cardiomyocytes from type 1 diabetic rats. 25 th Annual ISHR European Section Meeting, June 21-55, Tromso, Norway, Abstract in: J. Mol. Cell. Cardiol. 38 (6), 1076-1077, 2005.
39. Toyran N., Turan B., Severcan F. The role of selenium treatment on diabetes-induced changes I rat heart at the molecular level. 25 th Annual ISHR European Section Meeting, June 21-55, Tromso, Norway, Abstract in: J. Mol. Cell. Cardiol. 38 (6), 1066, 2005.
40. Turan B, Yaras N, Bilginoglu A, Amber F, Ugur M. Sex difference affects  $\text{Ca}^{2+}$  sparks parameters and  $\square$ -adrenergic receptor responses in rat heart. 50 th Annual Meeting of American Biophysical Society, Feb. 18-22, 2006, Salt Lake- USA.
41. Nazmi Yaras, Erkan Tuncay, Nuhan Purali, Babur Sahinoglu, Guy Vassort, Alain Lacampagne, Belma Turan: Sex Differences Affect  $\text{Ca}^{2+}$  Sparks Parameters In Normal And Diabetic Rat Ventricular Cardiomyocytes, International Societyfor Heart Research, From Cell To Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 109, 2007.
42. Nazmi Yaras, Ayca Bilginoglu, Aslihan Koksoy, Richard Schulz, Belma Turan; Reduced Myocardial Contractile Function In Diabetic Cardiomyopathy—Possible Role Of Matrix Metalloproteinase-2. International Societyfor Heart Research, From Cell to Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 162, 2007.
43. Aslihan Koksoy, Esma Zeydanli, Evrim Tanrıverdi, Richard Schulz; Belma Turan: Doxycycline Ameliorates Diabetes-Induced Vascular Dysfunction. International Societyfor

Heart Research, FROM CELL TO MAN TO SOCIETY, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 228, 2007.

44. Erkan Tuncay, Ali Aytac Seymen, Evrim Tanrıverdi Nazmi Yaras, Belma Turan; Sex Related Differential Effects Of Omega-3e Treatment On Diabetes-Induced Left Ventricular Dysfunction. International Societyfor Heart Research, From Cell To Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 110, 2007.
45. Meltem Sariahmetoglu, Aslihan Koksoy, Ayca Bilginoglu, Arzu Besikci, Belma Turan, Richard Schulz; Inhibition Of Matrix Metalloproteinases Reduces Streptozotocin-Induced Diabetic Cardiomyopathy. International Societyfor Heart Research, FROM CELL TO MAN TO SOCIETY, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 169, 2007.
46. Ayca Bilginoglu, Figen Amber, Mehmet Ugur, Hakan Gurdal, Belma Turan; Role Of Sex Differences In □-Adrenergic Receptor Responsiveness Of Diabetic Rat Heart. International Societyfor Heart Research, From Cell To Man To Society, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 26, 2007.
47. Esma Nur Zeydanli, Evrim Tanrıverdi, Ali Aytac Seymen, Erkan Tuncay, Hakan Gurdal, Aslihan Koksoy, Belma Turan: Beneficial Effect Of Sodium Selenate On Vascular Dysfunction In Diabetic Rats. International Societyfor Heart Research, FROM CELL TO MAN TO SOCIETY, XIX World Congress of the ISHR Bologna (Italy), 22-26 June 2007. Abstract in J Mol Cell Cardiol. 42, suppl. 1, pp: 229, 2007.
48. A. Koksoy, M. Sariahmetoglu, A. Onay-Besikci, R. Schulz, B. Turan: Inhibition Of Matrix Metalloproteinase Activity Has Beneficial Effects In Diabetes-Induced Cardiomyopathy. FASEB Meeting, 2007, Washington DC, USA.
49. Bilginoglu A., Seymen A., Tuncay E., Köksoy A., Turan B. Antioxidants but not doxycycline restore depressed beta-adrenergic responses of the heart in diabetic rats. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44(4): 746.
50. Zeydanli EN., Bilginoglu A., Koksoy A., Turan B.: Roles Of Oxidant Stress and Matrix Metalloproteinases in Endothelium-Dependent Relaxation of Diabetic Rat Thoracic Aorta. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44(4): 767-768.
51. Tuncay E., Seymen A., Turan B. Beneficial effects of non-selective beta blockers on mechanical and electrical activities of diabetic rat heart. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44 (4): 775.
52. Seymen A., Tuncay E., Gurdal H., Turan B. Beneficial effects of long-term treatment with beta-adrenergic blocker on depressed heart function of female rats. XXVIII European section meeting of the International Society of Heart Research, Athens (Greece), 28-31 May 2008. Abstract in: J. Mol. Cell. Cardiol. 2008, 44 (4): 816.
53. A. Koksoy, E. Zeydanli, A. Bilginoglu, B. Turan: selenium protects from cardiac dysfunction by preserving contractile protein targets of oxidative stress in diabetic rats. 40th Annual meeting of the American College of Nutrition "Advences in Clinical Nutrition". September 30 – October 02, 2008, Washington DC, USA. Abstract in: J. American College of Nutrition, 2008, 27(5): 621.
54. Erkan Tuncay, Aytac A. Seymen, Belma Turan: Beneficial Effects with Beta-Adrenergic Receptor Blockers on Altered Intracellular Ca<sup>2+</sup> in Diabetic Rat Heart. XXXVI International Congress of Physiological Sciences (IUPS2009) Function of Life: Elements and Integration July 27–August 1, 2009, Kyoto, Japan. Abstract: The Journal of Physiological Sciences, Volume 59 · Supplement 1 · 2009, pp. 124.
55. Esma N, Zeydanli, Erkan Tuncay, Aytac A Seymen, Ayca Bilginoglu, Nazlı Sözen, Söğütözü Mah 2178/Cd. No:6 Çankaya ANKARA  
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ryanodine receptor function and cellular activity. Biophysical Society 54th Annual Meeting, February 20-24, 2010, San Francisco, USA.

56. Ayca Bilginoglu, Burak Kandilci, Belma Turan. The effect of insulin on intracellular Na + homeostasis in isolated cardiomyocytes from diabetic rats. International Academy of cardiology, 15 th World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 112, 2010.
57. Belma Turan. Role of ryanodine receptor as a new therapeutic target in diabetic heart dysfunction. International Academy of cardiology, 15 th World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 4, 2010.
58. Belma Turan. Enhancement of antioxidant defence against oxidative stress by timolol-treatment prevents age-/diabetes-related cardiac dysfunction via recovery of intracellular Ca-handling. Proceedings of 5 th Annual meeting of the Diabetes & Cardiovascular Disease: EASD study group, November 15-17, 2012, Paris, France. Diabetes Metabolism & the Heart, Special issue 5, Vol. 38, S107, 2012.
59. E. Tuncay, B. Turan: Activation of  $\beta$  3 -adrenoceptors induces increase in intracellular free Zn 2+ via NO signaling pathway in hyperglycemic cardiomyocytes. Biophysical Society 57 th Annual Meeting, February 2-6, 2013, Philadelphia, USA, Biophysical Journal, Special issue.
60. E. Tuncay, B. Turan: Enhancement of antioxidant defence preserves RyR2 function of hyperglycemic cardiomyocytes via regulation of both intracellular Zn 2+ and Ca 2+ homeostasis. Biophysical Society 57 th Annual Meeting, February 2-6, 2013, Philadelphia, USA, Biophysical Journal, Special issue.
61. E. Tuncay, F. A. Cicek, A. Toy, B. Turan: Intracellular free zinc increase triggers hyperglycemia-induced cardiomyocyte dysfunction through endoplasmic reticulum stress. Biophysical Society 58 th Annual Meeting, February 15-19, 2014, San Francisco, USA, Biophysical Journal, Special issue.
62. E. N. Okatan, A. Toy, B. Turan: Altered intracellular calcium ion regulation plays important role in high carbohydrate intake induced myocardial remodeling. Biophysical Society 58 th Annual Meeting, February 15-19, 2014, San Francisco, USA, Biophysical Journal, Special issue.
63. B. Turan: MicroRNAs: Are new players in cardiac dysfunctions? Proceedings of 5th World congress on Biotechnology, June 25-27, 2014, Valencia, Spain. Journal of Biotechnology and Biomaterials, June 2014, vo. 3 (5), pp. 128,
64. Erkan Tuncay, Aysegul Toy, Belma Turan: Association between  $\beta$ 3-adrenoceptor activation and intracellular free zinc ion increase contributes to hyperglycemia-induced cardiac ER-stress. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 433a
65. Aysegül Durak, Yusuf Olgar, Sinan Degirmenci, Erkan Tuncay, Belma Turan: An Investigation on Electrical Activity and Sarcolemmal KD-Channels in Cardiomyocytes from Insulin-Resistant Rat Heart. 60th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 272a
66. Yusuf Olgar, Erkan Tuncay, Belma Turan: Age-related changes in electrical activities and microRNAs of left ventricular cardiomyocytes isolated from rat heart. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 587a.
67. Sinan Degirmenci, Yusuf Olgar, Aysegül Toy, Belma Turan: Both Hyperglycemia and Hyperinsulinemia Induce Changes in Voltage-Dependent KD Channel Currents in H9c2 Ventricular Cells. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02, 2016, Los Angles, USA. Abstract No: 273a.
68. Erkan Tuncay, Verda C. Bitirim, Aysegul Toy, Zeynep Tokcaer-Keskin, Kamil C. Akcali, Guy A. Rutter, Belma Turan: Role of ZIP7 in regulation of cytosolic free Zn<sup>2+</sup> level in mammalian cardiomyocytes. 60 th Annual Meeting, Biophysical Society, Feb. 27 – March 02,

2016, Los Angles, USA. Abstract No: 588a.

69. Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Verda C. Bitirim, Evren Ozcinar, Mustafa Bahadir Inan, Kamil Can Akcali, Semir Ozdemir, Ahmet Ruchan Akar, Belma Turan. Role of zinc transporters in mammalian heart under physiological and pathological conditions. Biophysical Society 61 st Annual meeting, New Orleans, February 11-15, 2017, USA. Abstract in: Biophysical Journal, Volume 112, Issue 3, Suppl. 1.
70. Yusuf Olgar, Aysegul Durak, Erkan Tuncay, Semir Ozdemir, Belma Turan. The Zn 2+ transporters in hypertrophied rat heart. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.
71. Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Ceylan Verda Bitirim, Mustafa Bahadir Inan, Kamil Can Akcali, Ahmet Ruchan Akar, Belma Turan. Expression levels of zinc transporters in human failing heart. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.
72. Sinan Değirmenci, Yusuf Olgar, Erkan Tuncay, Belma Turan. Increased cytosolic free Zn 2+ alters action potential parameters via activation of KATP-channels in rat ventricular cardiomyocytes. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.
73. Erkan Tuncay, Verda C. Bitirim, Yusuf Olgar, Aysegul Durak, Guy A. Rutter, Belma Turan. Mitochondrial localization and function of Zn 2+ -transporters ZIP7 and ZNT7 in mammalian heart. 34 th Meeting of European section of International Society for Heart Research, July 24-27, 2017, Hamburg, Germany. Abstract in: Journal of Molecular and Cellular Cardiology 109 (2017) 1-62.
74. Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Belma Turan.  $\beta$ 3-adrenergic receptor regulation of cardiac ion channels in overweight insulin resistant rats. Biophysical Society 62 nd Annual meeting, San Francisco, February 17-21, 2018, USA. Abstract in: Biophysical Journal, Volume 114, Issue 3, Supplement 1, PP: 304a.
75. Belma Turan, Yusuf Olgar, Erkan Tuncay. Inhibititon of Protein Kinase G Preserves Prolonged Ventricular Action Potentials via Improvement of Slow-Activated Voltage-Dependent K+-Channel Currents in Aged Rat Cardiomyocytes. Abstract in: Biophysical Society 63 rd Annual meeting, Baltimore, March 02-06, 2019, USA. Abstract in: Biophysical Journal, Volume 116, Issue 3, Supplement 1, PP: 98a.
76. Erkan Tuncay, Hua-Qian Yang, Ivan Gando, Belma Turan, Ravichandran Ramasamy, William A Coetze. Sirtuins Positively Regulate K ATP Channels, Which Contributes to their Cardioprotective Role, in Biophysical Society 63 rd Annual meeting, Baltimore, March 02-06, 2019, USA. Abstract in: Biophysical Journal, Volume 116, Issue 3, Supplement 1, PP: 250a

#### **E.Yazılan ulusal/uluslararası kitaplar veya kitaplardaki bölümler:**

1. Belma Turan and Naranjan S. Dhalla: Advances in Biochemistry in Health and Disease: Volume 9, Diabetic Cardiomyopathy. Biochemical and Molecular Mechanisms, Springer, 2013. ISBN: 978-1-4614-9316-7.
2. Yilmaz A., Turan B. Measurements and Calculations of NMR spin-lattice relaxation time in human blood, Proceedings of the II. International conference on applications of physics to Medicine and Biology, Ed: Z. Bajker, P. Baxa, C. Franconi, World Scientific publ.co. Singapore, 557-558, 1984
3. Yilmaz A., Altintas C., Turan B. NMR relaxation mechanism in serum from healthy subjects, Proceedings of the XXII Congress of Ampere on Magnetic Resonance and Related Phenomena, Ed: K.A. Muller, R. Kind, J. Roos, Zurich, 483-484, 1984

4. Yıldırım G., Zaloğlu N., Turan B., Temizer A., Koç E., Timur A. The Effects of Lithium on the Levels of Trace Elements in Liver and Spleen and Serum, Trace Elements in Health and Disease: Trace'89. Ed. Yüregir G. T., Donma O., Kayrýn L., Türkiye, 403- 408,1991
5. Zaloğlu N., Yıldırım G., Koç E., Turan B., Saran Y., Temizer A., Timur A. The Effects of Lithium on Liver and Spleen Tissues and Serum, Trace Elements in Health and Disease: Trace'89. Ed. Yüregir G. T., Donma O., Kayrin L., Türkiye, 397-402, 1991
6. Yavuzer S., Turan B. Infrared Laser Effects on Excitation-Contraction Coupling and the Level of Some Metals of skeletal Muscle, Trace Elements in Health and Disease: Trace'89. Ed. Yüregir G. T., Donma O., Kayrýn L., Türkiye, 291-297, 1991
7. B. Turan. Relationship Between Redox Regulation and □-Adrenergic Responses in the Heart. Advances in Biochemistry in Health and Disease, Signal Transduction in Cardiovascular System in Health and Disease, Ed: A. Srivastava and M. Srivastava, Springer,2008.
8. B. Turan, G. Vassort. Cardioprotective Roles of Selenium in Diabetes. Nutritional and Therapeutic Intervention of Diabetes and Metabolic Snydrome. Ed: D. Bagchi and S. Nair, Ensevier, 2011.
9. M. Ayaz and B. Turan. A critical balance between oxidative stress and antioxidant defence in cardiovascular system under hyperglycemia: A summary of experimental studies. Advances in Biochemistry in Health and Disease: Volume 9, Diabetic Cardiomyopathy. Biochemical and Molecular Mechanisms, Springer, 2013. Ed: B. Turan and N. S. Dhalla, 2013.
10. S. Ozdemir, N. Yaras and B. Turan: Sex differences and diabetes mellitus in cardiovascular system. Advances in Biochemistry in Health and Disease: Volume 9, Diabetic Cardiomyopathy. Biochemical and Molecular Mechanisms, Springer, 2013. Ed: B. Turan and N. S. Dhalla, 2013.
11. B. Turan: Oxidative stress and labile zinc in heart dysfunction under hyperglycemia, in Oxidative Stress in Heart Diseases, Springer, 2019, Lead Editor: Sajal Chakraborti.
12. B. Turan and E. Tuncay: New Thoughts to combat overweight body. Monitoring Nutritional control in Diabetes and Obesity, in Personalized Nutrition in Health and Disease, CRC press, April 2020, Ed: Nilanjana Maulik.
13. E. Arioglu-Inan and B. Turan: Monitoring Nutritional control in Diabetes and Obesity, in Personalized Nutrition in Health and Disease, CRC press, April 2020, Ed: Nilanjana Maulik.
14. B. Turan: Oxidative Stress and Labile Zinc in Heart Dysfunction Under Hyperglycemia, in Oxidative Stress in Heart Diseases, Springer press, 2019, Eds: Sajal Chakraborti, Naranjan S Dhalla, Nirmal K Ganguly, Madhu Dikshit.
15. B.Turan, D. Billur, Y. Olgar: Labile zinc ion homeostasis in cardiomyocytes under hyperglycemia and hyperinsulinemia, in "Zinc Signals in Cellular Functions and Disorders" Springer press, 2019, Eds: T. Fukada and T. Kambo.
16. Belma Turan: Role of sodium-glucose co-transporters on cardiac dysfunction in overweight metabolic syndrome mammals, in "Pathophysiology of Obesity-induced Health Complications" Springer press, 2020, Eds: Tappia, Dhalla and Ramjiawan.
17. B.Turan, D. Billur. "New therapeutic agents in obesity-related cardiovascular disorders: Molecular and cellular insights" in Cellular and Biochemical Mechanisms of Obesity, Springer press, 2021, Eds: Tappia, Dhalla.

## F. Davetli Konuşmalar

1. Turan B. Protective effect of selenium treatment on diabetes induced myocardial structural alterations. 5. Schrauzer Symposium, 3 November 2003, Baden-Baden, Germany.

2. Turan B. Selenium restores increased intracellular free zinc concentration in streptozotocin-induced diabetic rat cardiomyocytes. ISTERH 7<sup>th</sup> International Conference: Trace element nutrition and human disease. November 7-12, 2004, Bangkok, Thailand.
3. Turan B. Role of electrophysiological studies in investigation and evaluation of complications in diabetic heart: new therapeutic approaches. Global conference on heart and disease, October 12-15 2006, Winnipeg, Canada.
4. Turan B. Inhibition of angiotensin type 1 receptor prevents diabetes-induced alterations in Ca<sup>2+</sup> signaling. The 5<sup>th</sup> International Congress of Pathophysiology, June 28 July 01, 2006, Beijing, China.
5. Turan B. Conference on "Role of oxidative stress in regulating intracellular ions of cardiomyocytes: diabetes-induced changes in zinc", May 11, 2006, Edmonton-Canada.
6. Turan B. Gender related differences in local Ca release in normal and diabetic rat cardiomyocytes: electrophysiological and molecular approach. 5<sup>th</sup> Larry and Horti Fairberg Workshop: Control and regulation of biological transport phenomena with emphasis on the cardiac system. September 16-20, 2007, Antalya, Turkey
7. Turan B. A novel antioxidant effect of selenium on cardiovascular dysfunction via inhibiting diabetes-induced activated matrix metalloproteinase-2. Scientific Forum XVII International Congress of Cardiovascular Sciences and XXV Brazilian Congress on Extracorporeal Circulation, November 22-25, 2007, Belo Horizonte, Brazil.
8. Turan B. Gender related differences in local calcium release in normal and diabetic rat cardiomyocytes. Simposium International de Investigacion Cardiovascular, January 25-27, 2007, Holguin, Cuba.
9. Turan B. Role of oxidative stress in regulating intracellular ions of cardiomyocytes in experimental diabetes. International Conference on Emerging trends in free radical and antioxidant research and SFRR-Asia, SFRR-India, January 8-11, 2007, Lonavala, India.
10. Turan B: Konfokal mikroskopinin elektrofizyolojik yöntemlerdeki yeri: Ryanodin reseptörlerinin diyabetik kardiyomiyopatideki rolü. Türk Fizyolojik Bilimler Derneği 33. Ulusal Kongres, 15-19 Ekim 2007, Kıbrıs.
11. Turan B. Reduced myocardial contractile function in diabetic cardiomyopathy is reversed by inhibition of matrix metalloproteinases. Second International Symposium on Recent advances in cardiovascular sciences: February 28, 2008, New Delhi, India.
12. Turan B. Beneficial effects of non-selective beta blockers on mechanical and electrical activities of normal and diabetic rat heart. ISHR (Indian Section) 2008, 29 February – 2 March, 2008, Chandigarh, India.
13. Turan B. Protective action of doxycycline in diabetic cardiomyopathy in rats. Mendel Symposium II: Genes and the heart, Joint meeting of the Japan and European Sections of the International Academy of Cardiovascular Sciences, September 24-27, 2008, Leblice, Czech Republic. Abstract: Exp. Clin. Cardiology, 2008; 13(3): 144-156.
14. Turan B. Advances in Cardiovascular Research: From genes and molecules to clinical applications, International symposium. September 27-29, 2008, Devin-Bratislava, Slovakia.
15. Turan B. Role of oxidant stress and matrix metalloproteinases in endothelium-dependent relaxation of diabetic rat aorta. ISARCON 2008, December 8-10, 2008, Tamil Nadu, India.
16. Turan B. Intracellular zinc homeostasis brings new insights into cardiac excitation-contraction coupling in normal and diabetic rats. Symposium: Translational research in cardiovascular medicine. from bench side to bedside and vice-versa. December 11, 2008, Baroda, India.
17. Turan B. Ryanodine receptors: a novel therapeutic target in type 1 diabetic cardiomyopathy. Joint International Conference of the International Society of Heart Research (Indian section) & the International Academy of Cardiovascular Sciences, December 13-15, 2008, Surat, India.

18. Turan B. Diabetes-induced altered function and regulation of cardiac ryanodine receptors. Sudden Cardiac Death – Cardiovascular Theraphy, European Society of Cardiology, June 18-21, 2009, Copenhagen, Denmark.
19. Turan B. Age and sex dependent effects of beta-blockers on heart function. 9<sup>th</sup> International Symposium on Pharmaceutical Sciences, June 23-26, 2009, Ankara, Turkey.
20. Turan B. Ryanodine receptors in heart failure: potential therapeutic site. 3<sup>rd</sup> International Conference: myocardial protection from bench to clinical application, April 17-20, 2010. Amman-Jordan.
21. Belma Turan. Role of intracellular Zn<sup>2+</sup> in excitation-contraction coupling of cardiomyocytes. Symposium on Scientific Basis for the Practice of Cardiology. April 8-11, 2010, Prague, Czech Republic.
22. Belma Turan. Role of ryanodine receptor as a new therapeutic target in diabetic heart dysfunction. International Academy of cardiology, 15<sup>th</sup> World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 4, 2010.
23. Belma Turan. Role of intracellular Zn<sup>2+</sup> in excitation-contraction coupling of cardiomyocytes. Symposium on Scientific Basis for the Practice of Cardiology. April 8-11, 2010, Prague, Czech Republic.
24. Belma Turan. Role of ryanodine receptor as a new therapeutic target in diabetic heart dysfunction. International Academy of cardiology, 15<sup>th</sup> World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 4, 2010.
25. Belma Turan. Role of antioxidants and redox regulation in diabetic cardiovascular system disorders. Jerusalem Symposium on molecular and metabolic dysfunction in diabetes. October 7-8, 2010, Jerusalem, Israel,
26. Belma Turan. Cardiac ryanodine receptors and diabetic cardiomyopathy. 4th World congress International Academy of Cardiovascular Sciences, February 1-3, 2011. Vadodara, India.
27. Belma Turan. Role of intracellular Zn<sup>2+</sup> in excitation-contraction coupling of cardiomyocytes. New York University School of Medicine NYU Medical Center, 560 First Avenue, New York, April 08, 2011.
28. Belma Turan. Cardiac Ryanodine receptors and diabetic cardiomyopathy: Potential therapeutic sites. Department of Medicine, Cell Biology and Pharmacology at SUNY, Downstate Medical Center, April 06, 2011.
29. Belma Turan. Chronic resveratrol treatment protects the cardiovascular system against diabetes-induced damage while its direct effect is detrimental. International College of Angiology, 53rd Annual World Congress, September 18-20, 2011, Indonesia.
30. Belma Turan. Deneysel diyabetik kardiyomiyopatide ryanodin reseptörlerinin rolü. 21. ulusal farmakoloji kongresi, panel konuşması. 19-22 Ekim 2011, Eskişehir.
31. Belma Turan. Potential therapeutic benefits of beta-blockers directed to cardiac function in diabetic rats. Universite Paris Sud, INSERM U-769, Paris, October 26, 2011.
32. Belma Turan. The role of intracellular free zinc during cardiac excitation-contraction coupling in both physiological and pathophysiological conditions. International Society of Zinc Biology 2012 Conference, 15-19 January, 2012; Melbourne, Australia.
33. Belma Turan. Oxidative stress induces coupled Zn<sup>2+</sup> and Ca<sup>2+</sup> dyshomeostasis in ventricular cardiomyocytes from diabetic rats. 3rd International Workshop on Molecular Approaches to obesity and diabetes with new implications. 15-16 March, 2012; METU, Ankara.
34. Belma Turan. Biological trace elements in health and disease: a summary on role of intracellular zinc in living cells. Second advanced summer school in Africa: Nutrition and Disease: Biochemical and Molecular insights. 23-31 March, 2012, Cape Town, South Africa.
35. Belma Turan. Selenium and Disease: electrophysiological and biochemical insights. Second advanced summer school in Africa: Nutrition and Disease: Biochemical and Molecular insights. 23-31 March, 2012, Cape Town, South Africa.

36. Belma Turan. Zinc/Calcium ion Dyshomeostasis in Cardiomyocytes from Streptozotocin-Induced Diabetic Rats. 31 May, 2012, Lab. Toxicol. Pharmacol. NIEHS, North Carolina, USA.
37. Belma Turan. Dyshomeostasis of zinc and calcium in cardiomyocytes from diabetic rat heart. Conference and Advanced research workshop: Sudden cardiac death and cardioprotection. 6-9 September, 2012. Timisoara, Romania.
38. Belma Turan. Role of ROCK upregulation in endothelial and smooth muscle vascular functions in diabetic rat aorta. Advances in cardiovascular research from bench to bedside. International symposium, May 23-26, 2013, Bratislava, Slovakia.
39. Belma Turan. Experimental studies on association between microRNAs and cardiac remodeling in subjects under both diabetes and hypoxia. The cardiovascular forum promoting centers of excellence and young investigations. August 15-17, 2013, Louisville, USA.
40. Belma Turan. A new action of MMP inhibitor doxycycline: an antioxidant-like action of doxyxycline protects cardiovascular system against diabetes-induced dysorders. VII. International Symposium on Myocardial Cytoprotection. From basic sciences to clinical perspectives, 26-28 september, 2013, Pecs, Hungary.
41. Belma Turan. A summary of 20-year Zinc-story: Role of intracellular Zn<sup>2+</sup> in excitation-contraction cycle of cardiomyocytes. Zn-Net COST Action TD 1304, Management Committee Meeting. March 25-26, 2014, Budapest, Hungary.
42. Belma Turan. Oxidative Stress Induces Coupled Zn<sup>2+</sup> & Ca<sup>2+</sup> Dyshomeostasis in Ventricular Cardiomyocytes from Diabetic Rats, June 14-15 2014, Lond, Sweden. COSTCMST Action CM1003, Management Committee Meeting.
43. Belma Turan. A new intracellular signaling molecule free Zn<sup>2+</sup> mediates endoplasmic reticulum stress in hyperglycemic cardiomyocytes. IACS European section meeting, October 8-11, 2014, Balatonlake, Hungary.
44. Belma Turan. Sex Differences and Diabetes Mellitus in Cardiovascular Function. 2<sup>nd</sup> Cardiovascular Forum for promoting Centers of Excellence and Young Investigators, Winnipeg, Canada, September 4-6, 2014.
45. Belma Turan. An investigation on intracellular free Zn regulation in freshly isolated cardiomyocytes under hyperglycemia or hyper insulinemia. The 4th International ISZB meeting, September 14-19, 2014, Asilomar, Pasific Grove USA.
46. Belma Turan. Roles of beta-adrenergic receptor subtypes in development of diabetic cardiomyopathy. 7<sup>th</sup> In ternational Conference on "Recent Advances in Cardiovascular Sciences", Amity Univesrity, 10-11 March 2015, Noida, India.
47. Belma Turan. Distinctive effects of beta-blockers in diabetic cardiomyopathy: restoration of the failing heart linked to oxidative stress. Indo-Canadian Symposium on heart failure: Progress and Prospects, 12-14 March 2015, Kerala, India.
48. Belma Turan. Cardioprotective effects of beta-blockers mediated by scavenging reactive oxygen and nitrogen species in diabetes. 11<sup>th</sup> International Symposium on Pharmaceutical Sciences, 09-12 june, 2015, Ankara, Turkey.
49. Belma Turan. Both hyperglycemia and hyperinsulinemia induce changes in voltage-dependent K-channel currents in H9c2 ventricular cells. 13th Global Diabetes Conference, August 8-10, 2016, Birmingham, UK. Journal of Diabetes & Metabolism, 2016, 7 (7): 48.
50. Belma Turan. An investigation on the distribution of Zinc-transporters in failing mammalian heart. 3d European Section Meeting of the International Academy of Cardiovascular Sciences, October 1-4, 2016, Marseille, France. Current Res. Cardiol. 2016, 3 (3): 99.
51. Belma Turan. Metabolik sendrom ilişkili kardiyovasküler sistem bozukluklarının incelenmesinde biyofiziksel yaklaşımlar: Beta3-adrenorezeptörlerin rolü. ANES Eczacılık simpozyumu, Anadolu Üniversitesi, 1-2 Haziran, eskişehir, 2017.

52. Belma Turan. Does  $\beta_3$ -Adrenergic Receptor Activation Have Cardioprotective Effect in Insulin Resistant Overweight Rats? 5<sup>th</sup> Annual Meeting of the International Academy of Cardiovascular Sciences (IACS): North American Section on August 31-September 2, 2017; Orlando, USA.
53. Belma Turan. Kardiyovasküler Fonksiyon Bozukluklarıyla ilgili Mekanizmaların Aydınlatılmasında Elektrofizyolojik ve Biyokimyasal-Moleküler Yaklaşımının Önemi Intrasellüler Sinyal Molekülü Olarak Serbest Zn<sup>2+</sup>: Serbest Zn<sup>2+</sup> ve Zn<sup>2+</sup>-ilişkili Sinyal İletiminin Kardiyovasküler Patolojilerdeki Rolü, Uluslararası Katılımlı 28-29. Ulusal Biyofizik Kongresi, 6-9 Eylül 2017, İstanbul.
54. Belma Turan. Impact of Zinc on Cardiomyocytes. 33. Joint Annual Meeting of the German Society for Minerals and Trace Elements (GMS) with Zinc-UK, September 28<sup>th</sup> – 30<sup>th</sup> 2017; Aachen, Germany.
55. Belma Turan. Basis for zinc and zinc transporters in heart health and heart-associated pathology. 5th European section meeting of the International Academy of Cardiovascular Sciences, Advances in Cardiovascular Research, Ma7 23-26, 2018, Bratislava, Slovakia.
56. Belma Turan. History of basic cardiovascular research in Turkey. Back to the Future: 30 years of health research by alumni of the Albrechtsen Research Centre. April 20-22, Winnipeg, Manitoba, Canada.
57. Belma Turan: Zinc and cardiac function under physiological and hyperglycemic conditions. IACS North American section meeting in XXX Congreso Centroamericano y del Caribe de cardiología IX Congreso Cubano de Cardiología, June 05-08, 2018, Havana, Cuba.
58. Belma Turan: Role of Mitochondria-associated Oxidative Stress in Aging Heart Function, MitoEAGLE COST, September 19, 2018, Jurmala, Latvia.
59. Belma Turan: Cardioprotective Action of Mitochondria-Targeted Antioxidant MitoTEMPO via Affecting Electrical Activity of Aged-Rats Cardiomyocytes, 4rd EU-CARDIOPROTECTION COST Action, Feb 12th – 15th 2019, Kragujevac, Serbia.
60. Belma Turan: An Investigation on the Beneficial Effects of SGLT2 Inhibitors on the Heart Dysfunction in Insulin-Resistant Mammals Through Augmentation of Mitochondrial Function by Using Biophysical Approaches. Near East University, April 02, 2019, Cyprus.
61. Belma Turan: Kalp fonksiyonunda  $\beta_3$ -adrenerjik reseptör aktivasyonunun hücre içi serbest Zn<sup>2+</sup> artışı aracılı etkisi. Akdeniz Üniversitesi Tıp Fakültesi, 30 Nisan 2019, Antalya.
62. Belma Turan: Biyolojik sistemlerin fonksiyonlarının incelenmesinde biyofizikal ve biyokimyasal-moleküler yaklaşımların birlikte olduğu ve önemi. Lokman Hekim Üniversitesi Tıp Fakültesi, Bilim Günleri Sempozyumu, 02-03 Mayıs 2019, Ankara.
63. Belma Turan: Role of free zinc and zinc-transporters in insulin resistant mammalian heart function. "The 6th Meeting of International Society for Zinc Biology", 9-13.9.2019, Kyoto, Japan.

## Diğer Uluslararası ve Ulusal Kongre Bildirileri

- 1.Turan B. Hematolojik Araştırmalarda Elektron Spin Rezonans, TÜBİTAK Magnetik Rezonans Araştırma Ünetesi, I. Magnetik Rezonans Kolloquium, 2-4 Kasım, 1981, Ankara, Bil. Özeti Kit., s: 5.
2. Turan B., Güner Z., Öztekin E., Oral B. Kanda Bulunan Cu<sup>2+</sup> and Fe<sup>3+</sup> Paramagnetik Metal İyonları Özelliklerinden Yararlanarak Normal ve Hasta Kanlarının ESR Yöntemiyle İncelenmesi, IV. Fizik Kongresi, 13-15 Eylül, 1982, Ankara, Tebliğ Özeti, sayfa: 33
3. Yılmaz A., Turan B. Measurements and Calculations of Spin- Lattice Relaxation Time T1 in Human Blood, 2nd International Conference on Applications of Physics to Medicine and Biology, November 7-11, Trieste, Italy, Abst., pp. 5
4. Yılmaz A., Altıntaş C., Turan B. NMR Relaxation Mechanism in Serum from Healthy Subjects, XXII Congress of Ampere on Magnetic Resonance and Related Phenomena, September 10-15, 1984, Zurich, Switzerland.

5. Turan B., Yılmaz A., Ranu H.S. Spin Lattice Relaxation Time of Human Blood: An NMR Study, 8th Annual Meeting American Society of Biomechanics, October 3-5, 1984, Arizona, USA., Proceedings of Congress, pp: 41.
6. Turan B., Delilbaşı E., Yücel E., Temizer A. IR Laser Effects on the Level of Various metals in Skeletal Muscle from Rats. Ist Marmara Medical Days, September 26-30, 1988, İstanbul, Marmara Med. J., Special Issue, Vol. 1, No. 3, pp: 2.
7. Yavuzer S., Turan B. Infrared Laser Effects on Excitation-Contraction Coupling of Some Metals of Skeletal Muscle, Third International Congress on Trace Elements in Heath and Disease, March 31April 8, 1989, Adana, Türkiye, Abstract Book, pp:64
8. Yıldırım G., Zaloğlu N., Turan B., Temizer A., Koç E., Timur A. The effects of Lithium on the Levels of Trace Elements in Liver and Spleen Tissues and Serum, Third International Congress on Trace Elements in Heath and Disease, March 31- April 8, 1989, Adana, Türkiye, Abstract Book, pp:92
9. Zaloğlu N., Yıldırım G., Koç E., Turan B., Saran Y., Temizer A., Timur A. The Effects of Lithium on Liver and Spleen Tissues . Third International Congress on Trace Elements in Heath and Disease, March 31- April 8, 1989, Adana, Türkiye, Abstract Book, pp:91.
10. Yavuzer S., Turan B., Anadolu R, Cengizhan E., Yavuzer S. The Effects of Free Radical scavengers and Laser Irradiation on Wound Healing, XI Session des Journees Medicale Balkaniques, 25-27 Mai 1989, İstanbul, Türkiye, Resumes, pp: 178-179.
11. Yavuzer S., Turan B., Anadolu R. Infrared laser Işınlamasının Biyolojik Dokulardaki Olumlu ve Olumsuz Etkileri, XV. Ulusal Fizyoloji Kongresi, 10-12 Kasım 1989, Bursa, Bildiri Özeti, sayfa: 13.
12. Yücel E., Delilbaşı E., Turan B., Sağız R., İşimer A., Sayal A., Demiroz P., İşimer Y. Behçet Hastalığında serum selenyum Seviyesi, 9. Biyokimya Kongresi, 19-23 Kasım 1989, Antalya, Biyokimya Dergisi, Cilt XIV, Sayı 3, s:130-131.
13. Turan B., Delilbaşı E., İşimer A., Sayal A., Demiroz P., İşimer Y. ,Çeşitli Kanser Olgularında Serum Selenyum ve Immunglobulin Seviyeleri, 9. Biyokimya Kongresi, 19-23 Kasım 1989, Antalya, Biyokimya Dergisi, Cilt XIV, Sayı 3, sayfa: 130-131.
14. Turan B., Günay İ., Ranu H.S. Excitability of Sciatic nerve by Laser, First World Congress of Biomechanics, August 30- September 4, 1990, La Jolla, California, USA, Abstract Book, Vol.II, pp: 106
15. Günay İ., Turan B., Ranu H.S. Measurement of Nerve Compound Action Potential by Different techniques, First World Congress of Biomechanics, August 30- September 4, 1990, La Jolla, California, USA, Abstract Book, Vol.II, pp: 188.
16. Dalay N., Turan B., Eksinozlugil Z., Saydan N. Serum Free DNA in Cancer: Significance and Proposed Release Mechanism, Third European Congress on Cell Biology, 2-7 September, 1990, Firenze, Italy, Cell Biology International Reports, vol. 14, Abstract Supplement, pp: 176.
17. Turan B., Dalay N., Delilbaşı E. A Possible Relationship Between Serum Satellite DNA and Cellular Antioxidative Mechanism, Course on Cellular Regulation by Protein Phosphorylation, 5-15 September 1990, Chateau La Londe Les Maures, France, Abstract Book, pp: 204.
18. Hotomaroğlu Ö., Demirel H., Turan B. Çesitli Solunum Parametrelerinin Solunum İşi ve Frekansı Arasındaki ilişkiye Etkilerini Açıklayan Matematik Modelin Bilgisayar ile İncelenmesi, XVI. Ulusal Fizyoloji Kongresi, 29 Ekim- 1 Kasım 1990, Antalya, Bildiri Özeti, sayfa: 86- 87.
19. Turan B., Delilbaşı E., Dalay N., Sert S., Afrasyap L., Hotomaroğlu Ö. Kronik Böbrek ve Transplantasyon Hastalarında Serum Selenyum ve Glutatyon Peroksidad Düzeylerinin Karşılaştırılmış Olarak İncelenmesi, XVI. Ulusal Fizyoloji Kongresi, 29 Ekim-1 Kasım 1990, Antalya, Bildiri Özeti, sayfa: 87.
20. Turan B., Delilbaşı E. Türk Toplumunda Sağlıklı ve Çesitli Patolojik Serumlarda Selenyum Immunglobulin Düzeyleri, 2. Ulusal Biyofizik Kong., 17-18 Mayıs 1990, İstanbul, Özeti Kitabı, sayfa: 24.

21. Turan B., Dalay N., Delilbaşı E., Afrasyap L., Şengün Z. Terapötik Dozda Selenyum Suplementasyonunun Çeşitli Doku Element Düzeylerine ve Antioksidan Enzim Aktivitelerine Etkileri, İstanbul Tıp Fakültesi 11. Kurultayı, 22-25 Eylül 1991, İstanbul, Özетler Kitabı, sayfa: 26.
22. Turan B., Koç E., Delilbaşı E., Dalay N., Sayal A., Afrasyap L. Selenyumun İzole Düz Kas Kontraksiyon Parametrelerine ve Asetilkoline Cevaba Etkileri, İstanbul Tıp Fakültesi 11. Kurultayı, 22-25 Eylül 1991, İstanbul, Özetler Kitabı, sayfa: 31.
23. Yavuzer S., Anadolu R., Turan B., Erdem C. Terapötik Laser Işınlaması ve Antioksidan Uygulamasının Yara iyileşmesi Üzerine Etkileri, İstanbul Tıp Fakültesi 11. Kurultayı, 22-25 Eylül 1991, İstanbul, Özetler Kitabı, sayfa: 24-25
24. Dalay N., Turan B., Delilbaşı E., Afrasyap L. Glutathione peroxidase and Superoxide Dismutase Activities in Erythrocyte and Plasma of Rabbits Given selenium Rich Diet, Course on Dynamics of Membrane Assembly, June 17-29, 1991, Cargese, France, Abstract Book, pp: 11.
25. Turan B., Delilbaşı E., Afrasyap L., Dalay N. The Effects of High Selenium Level on the Membrane Enzyme Activities of Heart Muscle cells, Course on Dynamics of Membrane Assembly, June 17-29, 1991, Cargese, France, Abstract Book, pp: 93.
26. Delilbaşı E., Turan B., Delilbaşı L., Dalay N. Experimental Burn-induced Changes in Selenium Levels and Activity of Superoxide dismutase and Glutathione peroxidase in Skin Lesion, Course on Dynamics of Membrane Assembly, June 17-29, 1991, Cargese, France, Abstract Book, pp: 94.
27. Turan B., Dalay N., 1şimer A., Afrasyap L., Sayal A. Glutathione Peroxidase and Selenium Levels in Erythrocyte Plasma and Heart Muscle of Rabbits Given Selenium Rich Diet, The 1st International Biophysics Congress and Biotechnology at GAP, 1315 May 1991, Diyarbakır, Türkiye, Abstract Book, pp: 119.
28. Kızıltan E., Yazıcıoğlu G., Hotomaroğlu Ö., Koç, E., Turan B. Selenyumun İzole sıcan ileumunun Kontraksiyon Parametrelerine Etkisi, IV. Ulusal Biyofizik Kongresi, 27-29 Mayıs 1992, İstanbul, Bildiri Özetleri ve Posterler, sayfa: 8.
29. Afrasyap L., Turan B., Delilbaşı E., Dalay N. Selenium ve antioksidatif Mekanizma: Selenium Uygulamasının Glutatyon Peroksidaz ve Superoksit Dizmutaz Aktiviteleri Üzerindeki Etkileri, IV. Ulusal Biyofizik Kongresi, 27-29 Mayıs 1992, İstanbul, Bildiri Özetleri ,sayfa: 23.
30. Turan B., Dalay N., Delilbaşı E., Dingol D., Özgün B., Afrasyap L. The Role of Selenium Compounds in the Prevention of Experimentally Induced Cancers, 5 th International Congress on Cell Biology, 26-31 July, 1992, Madrid, Spain, Abstract Book, pp: 453.
31. Akkaş N., Yeni Y., Günel U., Delilbaşı E., Turan B. Effects of Medication on Biomechanical Properties of Rabbit Bones: Clinically Induced Osteoporosis, 8th International Conference on Biomedical Engineering, 7-10 December, 1994, Singapore, Proceedings Book, pp: 198-200.
32. Hotomaroğlu Ö., Kızıltan E., Turan B. Ekstraselüler selenit Uygulaması Sol ventrikül Papiller Kas Kontraksiyonuna Bifazik Etkileri, VI. Ulusal Biyofizik Kongresi, 28-30 Eylül, 1994, İstanbul, Bildiri Özetleri, sayfa: 19.
33. Hotomaroğlu Ö., Turan B. İzole Tek Sıcan Ventrikul Miyositlerde Kalsiyum Membran Akımlarının Whole-cell Patch-clamp Yöntemi ile Ölçülmesi, VI. Ulusal Biyofizik Kongresi, 28-30 Eylül, 1994, İstanbul, Bildiri Özetleri, sayfa: 20.
34. Turan B., Koç E. Asetilkolin ve Potasyum ile İndüklenmiş Sıcan İzole İleum Yanıtlarına Selenitin Etkisi, Türk Fizyolojik Bilimler Derneği 20. Ulusal Kongresi, 25-29 Ekim 1994, Bildiri Özetleri, sayfa: 73.
35. Turan B. Miyokardiyumda Oksidan Stress ve Ca<sup>2+</sup> Homeostazı: Bir Oksidan Stress olarak Selenitin Kardiyak Kontraktilité Üzerine Etkileri, Türk Fizyolojik Bilimler Derneği, 21. Ulusal Kongresi, 24-28 Eylül 1995, Ankara, Bildiri Özetleri Kitabı, sayfa: 17.
36. Turan B., Zaloğlu N., Sayal A., Tekin D., Köksoy A., Delilbaşı E. Diyetle Alınan Selenyum ve E vitamininin Antioksidan savunma Mekanizması ile İlişkisi, Türk Fizyolojik Bilimler Derneği, 21. Ulusal Kongresi, 24-28 Eylül 1995, Ankara, Bildiri Özetleri Kitabı, sayfa: 146.

37. Turan B., Koç E., Zaloğlu N., Türkmen A., Sayal A. Diyetteki Selenyumun ve E Vitamininin Doku Fonksyonları Üzerine Etkisi, Türk Fizyolojik Bilimler Derneği, 21. Ulusal Kongresi, 24-28 Eylül 1995, Ankara, Bildiri Özetleri Kitabı, sayfa: 147.
38. Turan B. Miyokardiyumda Oksidan Stress ve  $\text{Ca}^{2+}$  Homeostaz İlişkisi: Selenitin Kontraktilite Üzerine Oksidan Etkileri, VII. Ulusal Biyofizik Kongresi, 11-13 Ekim 1995, Adana, Bildiri Özetleri Kitabı, sayfa: 8.
39. Turan B., Zaloğlu N., Koç E., Akkaş N. Selenyum ve Antioksidan Savunma mekanizması Üzerine Deneysel Bir Çalışma, VII. Ulusal Biyofizik Kongresi, 11-13 Ekim 1995, Adana, Bildiri Özetleri Kitabı, sayfa: 9.
40. Turan B., Balçık C., Delilbaşı E., Akkas N. Effect of Dietary selenium and Vitamin E on the Biomechanical Properties of Bones and Skeletal Muscles, ASME Third Biennial Joint Conference on Engineering Systems Design and Analysis, 1-4 July, 1996, Montpellier, France, Proceedings-Vol.77-5, 113-116.
41. Yavuzer S., Anadolu R., Turan B., Yavuzer R. The Effect of Free Radical Scavengers on Wound Healing, VII. Biennial Meeting, International Society for Free Radical Research, 1-5 October 1996, Barcelona, Spain, Abstract Book, pp: 100.
42. Turan B., Demirel-Yılmaz E., Hotomaroğlu Ö., Kılıç M., Vassort G. Sıçan Kalbinin Elektrofizyolojik ve Mekanik Özellikleri Üzerine Diyetle Alınan Selenyum ve E Vitamininin Etkileri, XIII. Ulusal Farmakoloji Kongresi (uluslararası katılımlı) Program ve Bildiri Özetleri, 4-8 Kasım, 1996, Antalya, sayfa:51
43. Turan B., Dinçer D., Demirel-Yılmaz E. Damar Geçirgenliği üzerine Diyetle Alınan Selenyum ve E Vitamininin Etkileri, XIII. Ulusal Farmakoloji Kongresi (uluslararası katılımlı) Program ve Bildiri, Özetleri, 4-8 Kasım, 1996, Antalya, sayfa:52.
44. Turan B., Hotomaroğlu Ö., Kılıç M., Demirel-Yılmaz E. Sıçan ventrikül miyositlerinde oksidan stresin Ca-kanalları üzerine etkisinin path-clamp yöntemi ile incelenmesi, IX. Ulusal Biyofizik Kongresi, 5-6 Eylül 1997, Ankara, Özет Kitapçığı, sayfa: 31.
45. Turan B., Fliss H., Desilets M. Ventriküler miyositlerde oksidanlar etkisinde intrasellüler serbest  $\text{Zn}^{2+}$  konsantrasyonu artışının mikrospektrofluometrik yöntemle ölçülmesi, IX. Ulusal Biyofizik Kongresi, 5-6 Eylül 1997, Ankara, Özet Kitapçığı, sayfa: 61.
46. Ulusu N. N., Erten C., Acan N. L., Turan B. Diyetle alınan selenyumun tavşan karaciğer ve kalbindeki glutatyon peroksidaz ve glutatyon redüktaz enzimleri üzerine etkisi, IX. Ulusal Biyofizik Kongresi, 5-6 Eylül 1997, Ankara, Özet Kitapçığı, sayfa: 62.
47. Baştuğ M., Ayhan S., Turan B. Diyet selenyum ve vitamin E değişikliklerinin üçüncü kuşak sıçanlarda öğrenme ve bellek üzerine etkisi, Türk Fizyolojik Bilimler Derneği 23. Ulusal Kongresi, 29 Eylül-4 Ekim 1997, Adana, Bildiri Özetleri sayfa: 47-48.
48. Acan N.L., Turan B., Tezcan E.F. The role of dietary selenium on the inhibitory effect of cadmium on brain glutathione reductase. 11 th Balkan Biochemical Biophysical Days, May 15-17, 1997, Thessaloniki, Greece, Book of Abstracts, pp. 326.
49. Ulusoy, N.N., Acan N.L., Turan B., Tezcan E.F. Diyetle alınan selenyumun çeşitli tavşan dokularında glutatyon redüktaz aktivitesine etkisi ve kadmiyum toksisitesi ile ilişkisi. Türk Biyokimya Derneği XIV. Ulusal Biyokimya Kongresi ve Klinik Laboratuvarlarda Otomasyon Sempozyumu (Uluslararası katılımlı), 28-31 Ekim 1997, İzmir, Özet Kitabı, No. C-302.
50. Turan B., Uğur M., Sayar K., Gürdal H., Onaran O. Effect of dietary selenium intake on  $\alpha$ -adrenergic response of L-type Ca-current and  $\alpha$ -adrenoceptor-adenylate cyclase coupling in rat heart. Gordon Research Conferences on Cardiac Regulatory Mechanisms, Colby-Sawyer College, New London, New Hampshire, USA, July 19-24, 1998.
51. Ulusu, N.N., Acan N.L., Turan B., Tezcan E.F. Effect of dietary selenium on the glutathione reductase and glutathione peroxidase activity of rat liver and the relationship with  $\text{Cd}^{2+}$  toxicity. Sixth

Meeting of the Balkan Clinical Laboratory Federation, 08-12 October 1998, Plovdiv, Abstract in: Balkan Journal of Clinical Laboratory, vol. V, No 2, pp. 91, 1998.

52. Turan B.  $\beta$ -adrenerjik reseptörlerin kalsiyum kanal karakteristikleri üzerindeki kontrolü: kalpteki fizyolojik ve fizyopatolojik süreçlerdeki yeri. X. Ulusal Biyofizik Kongresi, 10-12 Eylül, 1998, İstanbul. Özeti: Bildiri Kitapçığı, sayfa: 9.
53. Ayaz M., Tuncer T., Ugur M., Turan B. Deneysel diyabette gözlenen kalp fonksiyon değişiklikleri. X. Ulusal Biyofizik Kongresi, 10-12 Eylül, 1998, İstanbul. Özeti: Bildiri Kitapçığı, sayfa: 26.
54. Balık C., Bayarı S., Uğur M., Sevcen F., Akkas N., Turan B. Deneysel olarak selenyum eksikliği ve fazlalığı oluşturulan sican kemiklerinin biyomekanik ve spektroskopik yöntemlerle incelenmesi. X. Ulusal Biyofizik Kongresi, 10-12 Eylül, 1998, İstanbul. Özeti: Bildiri Kitapçığı, sayfa: 17.
55. Uğur M., Sayar K., Gürdal H., Onaran O., Turan B. Diyetle alınan selenyumun sican kalbi membranlarında  $\beta$ -adrenoceptor adenyly cyclase çiftlenimi üzerine etkisi. X. Ulusal Biyofizik Kongresi, 10-12 Eylül, 1998, İstanbul. Özeti: Bildiri Kitapçığı, sayfa: 17.
56. Ayaz M., Tuncer T., Ugur M., Turan B. Sican kalp kası elektrofizyolojik ve mekanik özellikleri üzerine selenyumun *in vitro* etkileri. X. Ulusal Biyofizik Kongresi, 10-12 Eylül, 1998, İstanbul. Özeti: Bildiri Kitapçığı, sayfa: 30.
57. Koç E., Zaloğlu N., Saran Y., Turan B. Heparin ve ileum kontraktilitesi. Türk Fizyolojik Bilimler Derneği, 24. Ulusal Kongresi, 14-19 Eylül, 1998, Samsun, Bildiri kitapçığı, sayfa: 101.
58. Zaloğlu N., Koç E., Saran Y., Turan B. Yüksek doz ve uzun süreli heparin uygulamasının bazı fizyolojik parametreler ve akciğer dokusu üzerine etkileri. Türk Fizyolojik Bilimler Derneği, 24. Ulusal Kongresi, 14-19 Eylül, 1998, Samsun, Bildiri kitapçığı, sayfa: 109.
59. Ayaz M., Baştug M., Karaorman G., Uğur M., Turan B. Electrophysiological parameters of rat papillary muscle exposed to hyperbaric oxygen. International EUBS Congress, 28 August- 2 September 1999, Haifa and Eilat, Israel. Proceedings, pp. 4-7.
60. Çelebi N., Bingöl F., Yılmaz G., Yılmaz E., Turan B. Deneysel sodyum-selenit kataraktli ratlarda amilorid tedavisinin lens peroksidatif hasarı ve elektrolit düzeylerine etkisinin incelenmesi. The First International Biosciences Days, The First Congress of Balkan Association of Biosciences, XVth National Congress of Biochemistry, Clinical Laboratory Automation Symposium-II, April 20-24, 1999 Antalya, Turkey. Abstract Book, pp. P-507.
61. Ulus N. N., Acan N.L., Turan B., Tezcan E.F. Effect of selenium on glutathione peroxidase and glutathione reductase of rat brain. The First International Biosciences Days, The First Congress of Balkan Association of Biosciences, XVth National Congress of Biochemistry, Clinical Laboratory Automation Symposium-II, April 20-24, 1999 Antalya, Turkey. Abst. Book, P-574.
62. Kaptan N., Toyran N., Ayaz M., Turan B., Sevcen F. Fourier Transform Infrared study of the effect of diabetes on rat heart and liver tissues. Colloquium Spectroscopicum Internationale XXXI., September 5-10 1999, Ankara, Turkey, Book of Abstracts, pp. 296.
63. Sevcen F., Boyar H., Toyran N., Ayaz M., Turan B., Zorlu F. Hastalık ve radyasyon gibi faktörlerin sican kemik ve yumuşak dokularındaki etkilerinin FT-IR spektroskopisi ile incelenmesi. VII. Ulusal Medikal Fizik Kongresi, 11-13 Kasım 1999, İzmir, Özeti Kitapçığı s: 39.
64. Ayaz M., Tuncer T., Sakinci N., Uğur M., Turan B. *In vivo* selenyum uygulamasının diyabetik sicanların papiller kası aksiyon potansiyeli üzerindeki pozitif etkisi. Türk Biyofizik Derneği XI. Ulusal Kongresi, 31 Ekim-2 Kasım 1999, Antalya, Bildiri Özeti s: 18.
65. Tuncer T., Ayaz M., Sakinci N., Uğur M., Turan B. Sicanların atriyal aktiviteleri üzerine E vitamininin etkisinin elektrofizyolojik yöntemlerle incelenmesi. Türk Biyofizik Derneği XI. Ulusal Kongresi, 31 Ekim-2 Kasım 1999, Antalya, Bildiri Özeti s: 23.
66. Sevgi Bayarı, Handan Boyar, Belma Turan, Feride Sevcen. The effect of selenium-vitamin E deficiency and selenium excess on bone mineral and amide matrix, measured by Fourier Transform

Infrared Spectroscopy, XXV European Congress on Molecular Spectroscopy, August 27- September 1, 2000, Coimbra, Portugal. Book of Abstracts: p329.

67. N. Nuray Ulusu, N. Leyla Acan, Belma Turan, E. Ferhan Tezcan. Effects of dietary selenium on the glutathione reductase and glutathione peroxidase activities of animal tissues and the relationship with cadmium toxicity. Selenium 2000, 7<sup>th</sup> International Symposium on Selenium in Biology and Medicine. October 1-5, 2000, Venezia, Italy, Abstracts Book: p47.

68. Handan Boyar, Sevgi Bayar, Feride Sevencan, Belma Turan. Selenyum-vitamin E eksikliğinin ve selenyum fazlalığının kemik dokus üzerindeki etkisinin Fourier transform kızıl ötesi spektroskopisi tekniği ile incelenmesi. XII. Ulusal Biyofizik Kongresi, 7-9 Eylül, 2000, İstanbul, Bildiri Özetleri: P-23.

69. Neşe Kaptan, Neslihan Toyran, Belma Turan, Feride Sevencan. Diyabetin yumuşak doku üzerine olan etkisinin FTIR spektroskopi teknigi kullanılarak incelenmesi. XII. Ulusal Biyofizik Kongresi, 7-9 Eylül, 2000, İstanbul, Bildiri Özetleri: P-22.

70. Belma Turan. Alterations in electrical and mechanical behaviour of rat heart by oxidant stress: an overview of iv vivo and in vitro studies. 12<sup>th</sup> Balkan Biochemical and Biophysical Days, Molecular Biosciences in the post-genomic era. May 10-13, 2001 Bucharest, Romania. Book of Abstract, p: 17.

71. Handan Boyar, Belma Turan, Feride Sevencan. Comparison of streptozotocin-induced diabetic and control rat bones by FTIR spectroscopy. 12<sup>th</sup> Balkan Biochemical and Biophysical Days, Molecular Biosciences in the post-genomic era. May 10-13, 2001 Bucharest, Romania. Book of Abstract, p: 116.

72. Belma Turan, Murat Ayaz, Semir Ozdemir, Mehmet Ugur. Selenium shortens the prolonged action potentials in experimental diabetic rat hearts. ISHR Montreal, Diseases of the Cardiovascular System and Immunity, 12-15 July, 2001, Montreal, Canada.

73. Semir Ozdemir, Murat Ayaz, Mehmet Ugur, Belma Turan. In vivo selenit uygulamasının diyabetik kardiyomiyopatiye pozitif etkilerinin patch-clamp teknigi ile incelenmesi. XIII. Ulusal Biyofizik Kongresi, 5-7 Eylül 2001, Eskişehir, Bildiri Özetleri Kitapçığı, sayfa: S1.

74. Murat Ayaz, Semir Ozdemir, Mehmet Ugur, Belma Turan. In vivo selenit uygulamasının normal sıçan kalbi elektriksel aktivitesine etkilerinin elektrofizyolojik tekniklerle incelenmesi. XIII. Ulusal Biyofizik Kongresi, 5-7 Eylül 2001, Eskişehir, Bildiri Özetleri Kitapçığı, sayfa: S4.

75. Belma Turan. Diyabet ve oksidan stress: Elektrofizyolojik açıdan bakış (Panel). 17. Ulusal Biyokimya Kongresi 24-27 Haziran 2002 Ankara. Özett kitapçığı, S: 69-70.

76. Handan Boyar, Belma Turan, Feride Sevencan. Investigation of the effects of selenium on streptozotocin induced diabetic rat femur by x-ray diffraction and FTIR spectroscopic analysis. 1st Internat. Conf. on biomedical spectroscopy: from molecules to men. 7-10 July 2002, Cardiff, Wales (UK).

77. Belma Turan. Ülkemizdeki tıp fakültelerinde biyofizik eğitimi (panel). 14. Ulusal Biyofizik Kongresi, 4-6 Eylül 2002, Ankara.

78. Murat Ayaz, Semir Ozdemir, Mehmet Ugur, Özlem Ugur, Belma Turan. Diyabetik sıçan kalbi  $\beta$ -adrenoseptör yanıtlarının moleküler mekanizması. 14. Ulusal Biyofizik Kongresi, 4-6 Eylül 2002, Ankara. Özett Kitapçığı S: 34.

79. Semir Ozdemir, Murat Ayaz, Mehmet Ugur, Belma Turan. Anjiyotensin reseptör (AT1) antagonistinin diyabetik kardiyomiyopatiye etkisi. 14. Ulusal Biyofizik Kongresi, 4-6 Eylül 2002, Ankara. Özett Kitapçığı S: 36.

80. Belgin Can, Yüksel Saran, Belma Turan. Diyabetik sıçan kemiği ince yapısına sodyum selenitinin pozitif etkileri. 14. Ulusal Biyofizik Kongresi, 4-6 Eylül 2002, Ankara. Özett Kitapçığı S: 35.

81. Nezahat Zaloğlu, Belgin Can, Ertan Konukseven, Ertan delilbaşı, Emine Koç, Belma Turan. Vitamin-mineral kombinasyonunun osteoporotik kemik yapısına tedavi edici etkileri. 14. Ulusal Biyofizik Kongresi, 4-6 Eylül 2002, Ankara. Özett Kitapçığı S: 63.

82. Handan Boyar, Belma Turan, Feride Sevencan. FTIR spectroscopic investigation of the effect of selenium on streptozotocin induced diabetic rat femur and tibia in the C-H stretching region. Second

International conference on Biomedical Spectroscopy. 5-8 July, 2003, London, United Kingdom. Abstract Book in pp.32.

83. Özdemir S, Ugur M, Gürdal H, Turan B. Anjiyotensin II reseptörlerinin diyabetik kardiyomiyositlerin hücre içi serbest Ca homeostazındaki rolü: XV. Ulusal Biyofizik Kongresi, 8-12 Ekim 2003, Pamukkale, Özet Kitabı, s: 34.

84. Ayaz M, . Özdemir S, Ugur M, Turan B. Diyabetik kardiyomiyopatide hücre içi serbest Ca derişimi. XV. Ulusal Biyofizik Kongresi, 8-12 Ekim 2003, Pamukkale, Özet Kitabı, s: 35.

85. Boyar H, Turan B, Sevencan F. Selenyumun Diyabetik sıçan kemikleri üzerindeki etkilerinin FTIR spektroskopı ile C-H gerilme bölgesinde incelenmesi. XV. Ulusal Biyofizik Kongresi, 8-12 Ekim 2003, Pamukkale, Özet Kitabı, s: 91.

86. N. Nuray Ulusu, Kamer Kılinc, Belma Turan. Selenyumun diyabetik kalp ve karaciğer dokusu antioksidan savunma mekanizmasına ve yapısına etkilerinin incelenmesi. Klinik Biyokimya Günleri, 1. Ulusal Kongresi, 1-4 Ekim 2003, Kapadokya, Türkiye, Özet kitabı no. 147.

87. N. Nuray Ulusu, Leyla Acan, Belma Turan. A comparative study on effects of sodium selenite in altered antioxidant defences of heart and liver in diabetes. 13<sup>th</sup> Balkan Biochemical Biophysical days, 12-15 October, 2003, Kusadasi, Turkey. Abstract in: Turkish Journal of Biochemistry, 28(3), 206, 2003.

88. Turan B. Protective effect of selenium treatment on diabetes induced myocardial structural alterations. 5. Schrauzer Symposium, 3 November 2003, Baden-Baden, Germany.

89. Can B., Seker S.A., Saran Y., Turan B. Kronik selenium uygulamasının deneysel diyabetik sıçan akciğerlerinde oluşan yapısal değişikliklere etkisi.

90. Ulusu N.N., Turan B. Beneficial effects of selenium on some enzymes of diabetic rat heart. 11<sup>th</sup> International Biomedical science and technology days, September 6-10, 2004, Ankara, Turkey. Abstract Book, pp. 5.

91. Boyar H., Turan B., Sevencan F. Effects of selenium on diabetic rat femur: An FTIR study. 8<sup>th</sup> International Conference on the Chemistry and Biology of Mineralized tissues. October 17-22, 2004, Banff Centre, Alberta , Canada. Abstract Book, pp. 77.

92. Ulusu N.N., Turan B. Beneficial effects of selenium on some enzymes of diabetic rat heart. 11<sup>th</sup> International Biomedical science and technology days, September 6-10, 2004, Ankara, Turkey. Abstract Book, pp. 5.

93. Boyar H., Turan B., Sevencan F. Effects of selenium on diabetic rat femur: An FTIR study. 8<sup>th</sup> International Conference on the Chemistry and Biology of Mineralized tissues. October 17-22, 2004, Banff Centre, Alberta , Canada. Abstract Book, pp. 77.

94. Turan B. Underlying mechanisms and therapeutic approaches in diabetic heart failure. Advances in cardiology research. June 13-16, 2005, Bratislava, Slovak Republic. Abstract: pp. 35.

95. Can B., Saran Y., Turan B. Effects of corn oil on the structure of rights atria. 4<sup>th</sup> Asian-Pacific Congress of Anatomists. September 7-10 2005, Kusadasi-Turkey. Abstract Book pp. 128.

96. Ayaz M., Turan B. Sodyum selenitin diyabetle bozulmuş olan hücre içi serbest iyon regülasyonu üzerine pozitif etkileri. 17<sup>th</sup> Ulusal Biyofizik Kongresi, Eylül 7-9 2005, İzmir, Türkiye. Abstract Book, pp. 26.

97. Turan B. 3<sup>rd</sup> Annual National Res. Forum for Young Invest. Circ. & Resp. Health. May 4-7, 2006, Winnipeg-Canada (Committee Member of Symposia Award Competitions)

98. Turan B. Conference on "Role of oxidative stress in regulating intracellular ions of cardiomyocytes: diabetes-induced changes in zinc", May 11, 2006, Edmonton-Canada.

99. Yaras N, Ozdemir S, Turan B. Inhibition of angiotensin type 1 receptor prevents diabetes-induced alterations in  $Ca^{2+}$  signaling. The 5<sup>th</sup> International Congress of Pathophysiology, June 28 July 01, 2006, Beijing, China. Abstract in: Chinese Journal of Pathophysiology, vol 22 No. 13, pp. 39.

100. Ozdemir S, Ulusu N, Tandogan B, Turan B. Angiotensin II receptor blocker prevents diabetes-induced oxidative damage in rat heart. The 5<sup>th</sup> International Congress of Pathophysiology, June 28 July 01, 2006, Beijing, China. Abstract in: Chinese Journal of Pathophysiology, vol 22 No. 13, pp. 279.
101. Toyran N., Turan B., Sevrcan F. Diyabetin sıçan kalbi sol miyokardiyumu ve damarları üzerine olan etkisinin Fourier transform infrared mikrospektroskopı tekniği kullanılarak incelenmesi. Türk Biyofizik Derneği XVIII. Ulusal Biyofizik Kongresi, 6-9 Eylül 2006, Ankara. Özet: 25.
102. Toyran N., Turan B., Sevrcan F. Diyabetin sıçan kalbi sağ ve sol ventrikül miyokardiyum proteinleri üzerine olan etkisinin Fourier transform infrared mikrospektroskopı tekniği kullanılarak incelenmesi. Türk Biyofizik Derneği XVIII. Ulusal Biyofizik Kongresi, 6-9 Eylül 2006, Ankara. Özet: 26.
103. Turan B. Role of electrophysiological studies in investigation and evaluation of complications in diabetic heart: new therapeutic approaches. Global conference on heart and disease, October 12-15 2006, Winnipeg, Canada. Abstract: pp 42.
104. Turan B. Role of oxidative stress in regulating intracellular ions of cardiomyocytes in experimental diabetes. Konferans 8-11 Ocak 2007, India.
105. Turan B. Gender related differences in local calcium release in normal and diabetic rat cardiomyocytes. Konferans 25-27 Ocak 2007, Cuba.
106. Sargin A.K., Can B., Turan B. Matriks metalloproteneazların diyabete bağlı kardiyomiyopatide etkisinin ince yapı düzeyinde değerlendirilmes. Uluslararası katılımlı Ulusal 18. Elektron Mikroskopi Kongresi, 26-29 Ağustos 2007, Eskişehir. Özet kitapçığı, s: 216.
107. Zeydanlı EN., Tanrıverdi E., Seymen A., Tuncay E., Gurdal H., Koksoy A., Turan B. Beneficial effect of sodium selenate on vascular dysfunction in diabetic rats. Italy ISHR World Congress, Joint Meeting of The Slovak Physiological Society, Sepember 11-14, 2007. Bratislava, Slovakia.
108. Zeydanlı EN., Tanrıverdi E., Gurdal H., Koksoy A., Turan B. Diyabetli sıçan damar düz kası α1-adrenerjik yanıtlarında matriks metalloproteinazlar ve oksidan stresin rolü: Türk farmakoloji Derneği 19. Ulusal Farmakoloji Kongresi 24-27 Ekim 2007, Trabzon. Özet, s: 397.
109. Turan B. Antioxidants protects from cardiac dysfunction by preserving contractile protein targets of oxidative stress in diabetic rats. NATO ARW Workshop, May 12-18, 2008, İstanbul, Turkey. Abstract, pp: 34.
110. Koksoy A., Zeydanlı EN., Bilginoglu A., Gurdal H., Schulz R., Turan B. Role of Oxidant Stress and Matrix Metalloproteinases in Endothelium Dependent Relaxation of Diabetic Rats. NATO ARW Workshop, May 12-18, 2008, İstanbul, Turkey. Abstract, pp: 50.
111. Tuncay E., Seymen A., Gurdal H., Turan B. Chronic treatments with beta-adrenergic blockers have differential effects on electrical and mechanical activities of heart. NATO ARW Workshop, May 12-18, 2008, İstanbul, Turkey. Abstract, pp: 59.
112. M. Bastug, A. D. Dursun, A. Bilginoglu, H. Ficicilar, H. A. Demirel, B. Turan. Sıçanlarda deneysel tip 1 diabetes mellitusa bağlı sol ventrikül fonksiyon bozukluğuna aralıklı hipobarik hipoksının etkisi. Türk Fizyolojik Bilimler Derneği XXXIV. Ulusal Fizyoloji Kongresi, 6-10 Ekim 2008, Erzurum. Özet Kitabı, S. 147.
113. M. Namuslu, B. Kılıcoglu, A. Bilginoglu, E. Gurleyik, E. Zeydanlı, A. Avci, B. Turan, I. Durak. Effects of astragalus extract on oxidant/antioxidant status and myocardial contractility in streptozotocin-induced diabetic rats. Third International Congress of Molecular Medicine, May 2-8, 2009, İstanbul, Turkey. Abstract: IUBMB Life, 2009; 61(3): 337.
114. E. Tuncay, A. A. Seymen, B. Turan. Beneficial effects with beta-adrenergic receptor blockers on altered intracellular Ca<sup>2+</sup> in diabetic rat heart. Third International Congress of Molecular Medicine, May 2-8, 2009, İstanbul, Turkey. Abstract: IUBMB Life, 2009; 61(3): 337.
115. A. A. Seymen, E. Tuncay, B. Turan. Comparable but Different Beneficial Effects of Timolol and Propranolol in Maturation-Dependent Heart function. Third International Congress of Molecular Medicine, May 2-8, 2009, İstanbul, Turkey. Abstract: IUBMB Life, 2009; 61(3): 337.

116. Turan B. Diabetes-induced altered function and regulation of cardiac ryanodine receptors. Sudden Cardiac Death – Cardiovascular Theraphy, European Society of Cardiology, June 18-21, 2009, Copenhagen, Denmark.
117. Turan B. Age and sex dependent effects of beta-blockers on heart function. 9<sup>th</sup> International Symposium on Pharmacheutical Sciences, June 23-26, 2009, Ankara, Turkey.
118. M. Namuslu, B. Kilicoglu, A. Bilginoglu, E. Gurleyik, E. Zeydanli, A. Avci, B. Turan, I. Durak. Effects of astragalus extract on oxidant/antioxidant status and myocardial contractility in streptozotocin-induced diabetic rats. Third International Congress of Molecular Medicine, May 2-8, 2009, Istanbul, Turkey. Abstract: IUBMB Life, 2009; 61(3): 337.
119. Samet Yildirim, Esma Zeydanli, Duygu Akman, Belma TURAN. Role of antioxidant treatment on diabetes-induced altered actors of MAPK pathway of the heart. 20th World Diabetes Congress, 17-23 October 2009, Montreal, Canada
120. Erkan Tuncay, Aytac A. Seymen, Belma Turan. Beneficial effects with beta-adrenergic receptor blockers on diabetes-induced intracellular Ca<sup>2+</sup> related mechanisms in the heart. 20th World Diabetes Congress, 17-23 October 2009, Montreal, Canada
121. Esma N. Zeydanli, Ayca Bilginoglu, Erkan Tuncay, Aytac A. Seymen, Belma Turan: Zinc release modulates cardiac ryanodine receptors. FEPS 2009 – The physiology meeting, 12-15 November 2009, Ljubljana, Slovenia.
122. Ayca Bilginoglu, Esma N. Zeydanli, Erkan Tuncay, Aytac A. Seymen, Belma Turan. Cardiac Ryanodine Receptors: A Novel Therapeutic Target in Diabetic Cardiomyopathy. FEPS 2009 – The physiology meeting, 12-15 November 2009, Ljubljana, Slovenia.
123. Esma N. Zeydanli, Samet S. Yildirim, Duygu Akman, Belma Turan. Role of Intracellular Zinc on Phosphorylation level of Cardiac Ryanodine Receptors in Normoglycemic and Hyperglycemic Rats. 20th World Diabetes Congress, 17-23 October 2009, Montreal, Canada.
124. Ayca Bilginoglu, Erkan Tuncay, Aytac A. Seymen, Belma TURAN. Role of Intracellular Zinc Ion in Diabetic Cardiomyopathy. 20th World Diabetes Congress, 17-23 October 2009, Montreal, Canada.
125. Ayca Bilginoglu, Burak Kandilci, Belma Turan. The effect of insulin on intracellular Na<sup>+</sup> homeostasis in isolated cardiomyocytes from diabetic rats. International Academy of cardiology, 15<sup>th</sup> World congress on heart disease, Annual scientific sections 2010, Vancouver, BC, Canada, July 24-27. Abstract in: The Journal of Heart Disease, 7(1): 112, 2010.
126. Erkan Tuncay, Aytac A Seymen, Belma Turan: Beneficial Effects with Beta-Adrenergic Receptor Blockers on Altered Intracellular Ca<sup>2+</sup> in Diabetic Rat Heart. XXXVI International Congress of Physiological Sciences (IUPS2009) Function of Life: Elements and Integration July 27–August 1, 2009, Kyoto, Japan. Abstract: The Journal of Physiological Sciences, Volume 59 · Supplement 1 · 2009, pp. 124.
127. Esma N. Zeydanli, Erkan Tuncay, Aytac A Seymen, Ayca Bilginoglu, Nazlı Sözen, Mehmet Ugur, Guy Vassort, Belma Turan. Intracellular Zn<sup>2+</sup> release modulates cardiac ryanodine receptor function and cellular activity. Biophysical Society 54th Annual Meeting, February 20-24, 2010, San Francisco, USA.
128. Erkan Tuncay, H. Burak kandilci, Esma N. Zeydanli, Nazli N. Sozmen, Duygu Akman, Samet Yildirim, Belma Turan: Phosphorylation of ryanodine receptors plays important role in rat heart function during maturation. Frontiers in Cardiovascular Biology, Berlin 16-19 July, 2010. Abstract in: Cardiovascular Research, 2010, 87 (Supl. 1): S62.
129. Nazli N. Sozmen, Aytac Seymen, Erkan Tuncay, Belma Turan. Beneficial effects of beta-blocker treatment on basal cardiac function and responses to beta-adrenoceptor stimulation in female rats. ESC Council on Basic Cardiovascular Science, Fronties in Cardiovascular Biology, 16-19 July, 2010, Berlin-Germany. Abstract No: 205, in: Cardiovascular Research, 2010, 87 (Supl. 1): S11-114. Awarded poster presentation.

130. Yildirim S S, Catalucci D, Condorelli G, Turan B. Role of microRNAs in diabetic cardiomyopathy. 50th Annual meeting the American Society of Cell Biology, December 11-15, 2010, Philadelphia, PA, USA. Abstract no: 2564 B1170, pp.2010.

131. Erkan Tuncay, Esma N. Zeydanli, Belma Turan. Timolol treatment of diabetic rats improved basal cardiac function and responses to  $\beta_3$ - but not  $\beta_1$ - and  $\beta_2$ -receptors stimulations. Experimental Biology 2011, April 9-13, Washington DC, USA.

132. Belma Turan, Ayca Bilginoglu, H. Burak Kandilci. Intracellular  $\text{Na}^+$  homeostasis in diabetic mammalian cardiomyocytes. Experimental Biology 2011, April 9-13, Washington DC, USA.

133. Yildirim S S, Catalucci D, Condorelli G, Turan B. Role of microRNAs in diabetic cardiomyopathy. 50th Annual meeting the American Society of Cell Biology, December 11-15, 2010, Philadelphia, PA, USA. Abstract no: 2564 B1170, pp.2010.

134. Geçer, A., Yıldız, N., Turan B., Çalımlı A, "The Particle Size Determination of Candesartan-Cilexetil and Candesartan Loaded Nanoparticles" 6th Chemical Engineering Conference For Collaborative Research in Eastern Mediterranean Countries (EMCC-6), 7th-12th March 2010, Antalya.

135. Geçer, A., Yıldız, N., Turan B., Çalımlı A, "Ultrasonic Loading Technique for Candesartan has better Efficiency than Ionic Gellation", 2nd International Conference on Drug Discovery and Therapy (2nd ICDDT), 1-4 February 2010, Dubai.

136. E. Tuncay, E. N. Zeydanli, B. Turan. Timolol treatment of diabetic rats improved basal cardiac function and responses to  $\beta_3$ - but not  $\beta_1$ - and  $\beta_2$ -receptors stimulations. Experimental Biology 2011, April 9-13, Washington DC, USA.

137. B. Turan, A. Bilginoglu, H. B. Kandilci. Intracellular  $\text{Na}^+$  homeostasis in diabetic mammalian cardiomyocytes. Experimental Biology 2011, April 9-13, Washington DC, USA.

138. S.Yildirim, B. Turan. Role of oxidative stress via miR-199a in vascular dysfunction of thoracic aorta from diabetic rats. Experimental Biology 2011, April 9-13, Washington DC, USA.

139. E. N. Zeydanli and B. Turan. Oxidative Stress Plays Important Role on Cardiac Ryanodine Receptor Calcium Release Channels in Diabetic Rats. Experimental Biology 2011, April 9-13, Washington DC, USA.

140. A. Bilginoglu, H. B. Kandilci, Belma Turan. Intracellular  $\text{Na}^+$  Homeostasis in Mammalian Cardiomyocytes; Especially Diabetic Cardiomyocytes. International Symposium on New Approaches in Cardiovascular Disorders: From Genes & Molecules to Clinical Applications. May 4-8, 2011, Ankara, Turkey. Abstract Book, pp. 35.

141. E. Semizer, M. Yuceer, B. Turan, A. Calimli. Support Vector Machine is a Good Tool to Predict Blood Glucose Level in Diabetes Studies. International Symposium on New Approaches in Cardiovascular Disorders: From Genes & Molecules to Clinical Applications. May 4-8, 2011, Ankara, Turkey. Abstract Book, pp. 39.

142. E. Tuncay, E. N. Zeydanli, B. Turan. Timolol Treatment of Diabetic Rats Improved Basal Cardiac Function and Responses to  $\beta_3$ - but not  $\beta_1$ - and  $\beta_2$ -receptors Stimulations. International Symposium on New Approaches in Cardiovascular Disorders: From Genes & Molecules to Clinical Applications. May 4-8, 2011, Ankara, Turkey. Abstract Book, pp. 40.

143. E. Ozcinar, E.N.Zeydanli, S. Eryilmaz, U.Ozyurda, B.Turan. Protection of Donor Heart: Combining Cold-Storage with Doxycycline Preconditioning Exhibits Important Protection Against Ischemia-Reperfusion Injury via Preventing Oxidative Stress. International Symposium on New Approaches in Cardiovascular Disorders: From Genes & Molecules to Clinical Applications. May 4-8, 2011, Ankara, Turkey. Abstract Book, pp. 41.

144. E. N. Zeydanli and B. Turan. Oxidative Stress Plays Important Role on Cardiac Ryanodine Receptor Calcium Release Channels in Diabetic Rats. International Symposium on New Approaches in Cardiovascular Disorders: From Genes & Molecules to Clinical Applications. May 4-8, 2011, Ankara,

145. S. S. Yıldırım, D. Catalucci, G. Condorelli. MicroRNA Expression Profiles in Diabetic Rat Heart. International Symposium on New Approaches in Cardiovascular Disorders: From Genes & Molecules to Clinical Applications. May 4-8, 2011, Ankara, Turkey. Abstract Book, pp. 55.
146. Samet Serdar YILDIRIM, Esma Nur ZEYDANLI, H. Burak KANDILCI, Belma TURAN. Diyabetik Makrovasküler Bozukluklarda Moleküler Mekanizmalar: Rho Kinaz Yolağının Rolü. 23.Uluslararası Biyofizik Kongresi 13-16 Eylül 2011 Edirne. Özet kitabı, pp. 39.
147. Belma TURAN, Erkan TUNCAY, Esma Nur ZEYDANLI. Hücre İçi Serbest Zn<sup>+2</sup>'nun Uyarılma-Kasılma Çiftlenimindeki Rolünün Diyabetli Sıçan Kardiyomiyositlerinde İncelenmesi. 23.Uluslararası Biyofizik Kongresi 13-16 Eylül 2011 Edirne. Özet kitabı, pp. 38.
148. Belma TURAN, Esma Nur ZEYDANLI. Oksidant Stresin Kardiyak Ryanodin Rezeptör Ca<sup>2+</sup> Salan Kanallar Üzerindeki Etkisinin Diyabetik Sıçan Kalplerinde İncelenmesi. 23.Uluslararası Biyofizik Kongresi 13-16 Eylül 2011 Edirne. Özet kitabı, pp. 36-37.
149. Samet Serdar YILDIRIM, Daniele CATALUCCI, Gianluigi CONDORELLI, Belma TURAN. Diyabetik Kardiyomiyopatide Mikrorna'ların Rolünün Sıçan Kalbi Sol Ventrikül Dokusunda İncelenmesi. 23.Uluslararası Biyofizik Kongresi 13-16 Eylül 2011 Edirne. Özet kitabı, pp. 35-36.
150. Erkan TUNCAY, Esma Nur ZEYDANLI, Belma TURAN. Uzun Süreli Timolol Uygulamasının Kalbin Bazal Mekanik Aktivitesine Ve Beta-Adrenerjik Rezeptör Yanıtlarına Etkilerinin Diyabetli Sıçanlarda İncelenmesi. 23.Uluslararası Biyofizik Kongresi 13-16 Eylül 2011 Edirne. Özet kitabı, pp. 32-33.
151. Murat OKATAN, Belma TURAN. Aksiyon Potansiyeli Dizilerinin Filtrelenmesinde Faz Gecikmesinin Önemi. 23.Uluslararası Biyofizik Kongresi 13-16 Eylül 2011 Edirne. Özet kitabı, pp. 6.
152. SS Yıldırım, Kandilci HB, Zeydanlı EN, Turan B. Memeli kardiyomiyositlerinde sodyum-hidrojen değişim tokuçusunun hipoksiye olan duyarlılığı: mikro RNA'ların rolünün incelenmesi. 21. Ulusal Farmakoloji Kongresi, 19-22 Ekim 2011, Eskişehir. Özet kitabı, pp. 136.
153. Belma TURAN, Erkan TUNCAY, Esma Nur ZEYDANLI, Guy VASSORT. Role of beta-blockers on chronic ryanodine receptor phosphorylation in diabetic rat heart. 4th Annual meeting of the diabetes and cardiovascular disease EASD study group, October 27-29, 2011 Munich, Germany. Diabetes metabolism and the Heart, pp. 35.
154. Erkan TUNCAY, Esma Nur ZEYDANLI, Belma TURAN. Doxycycline regulates intracellular zinc in diabetic rat heart via regulation of cellular redox cycle. International Society of Zinc Biology 2012 Conference, 15-19 January, 2012; Melbourne, Australia.
155. Erkan TUNCAY, Belma Turan. A comparative study on beneficial effects of antioxidants on diabetes-induced cardiac contractile dysfunction. Second advanced summer school in Africa: Nutrition and Disease: Biochemical and Molecular insights. 23-31 March, 2012, Cape Town, South Africa.
156. Esma Nur Okatan, Erkan Tucay, Belma Turan. Investigation of in vitro effect of timolol on sarcoplasmic reticulum function in streptozotocin-induced diabetic rat heart. Cyclic nucleotide phosphodiesterases. A molecular exploration of cyclic-nucleotide action. 20-25 May 2012, Italy.
157. Tekin N., Yıldırım S. S., Kandilci H. B., Turan B. Hypoxia-induced dysregulated microRNAs and their potential target protein expressions in HL-1 cells. HypoxiaNet (COS TD0901). Sensing hypoxia in the cell and the organism. 20-23 September 2012, Essen, Germany.
158. Tekin N, Yıldırım S S, Kandilci H B, Turan B "MicroRNA-30b is down-regulated by hypoxia and in silico predicted target of Glyceraldehyde 3-phosphate dehydrogenase (GAPDH) in HL-1 cells" BPS toplantısı, Londra, İngiltere, 18-20 Aralık 2012. Bildiri No: P-095.
159. Kandilci HB, Tekin N, Turan B "Characterization and miR-210 dependent regulation of Na+/H+ exchanger-1 in HL-1 cardiomyocytes under chronic hypoxia" Pharmacology 2013, Londra, İngiltere, Aralık 17-19. Sözel bildiri No: OB003.
160. Erkan Tuncay, P. Chabosseau, A. Lyon, Belma Turan, Guy Rutter. Imaging of intracellular distribution of free zinc ion in cardiomyocytes. European section meeting of IACS, October 8-11, 2014, Lake Balaton, Hungary. Özet kitabı, 2014, sayfa no. 104 33.

161. Erkan Tuncay, Sinan Değirmenci, Aysegul Toy, Belma Turan. Effects of zinc ion on electrical and mechanical activities of the heart. European section meeting of IACS, October 8-11, 2014, Lake Balaton, Hungary. Özet kitabı, 2014, sayfa no. 103.
162. Esma N. Okatan, Erkan Tuncay, Aysegul Toy, Gaye Hafez, Belma Turan. Profiling of cardiac beta-adrenoceptor subtypes in left ventricle from metabolic syndrome rat heart: comparison with streptozotocin-diabetic rat. European section meeting of IACS, October 8-11, 2014, Lake Balaton, Hungary. Özet kitabı, 2014, sayfa no. 91.
163. Esma N. Okatan, Belma Turan. An electrophysiological investigation on cardiac function from rats taken high-carbohydrate diet. European section meeting of IACS, October 8-11, 2014, Lake Balaton, Hungary. Özet kitabı, 2014, sayfa no. 90.
164. Belma Turan, Erkan Tuncay, Aysegul Toy, Figen Amber Cicek.  $\beta$ 3- adrenergic receptor activation and endoplasmic reticulum stress via modulation of intracellular free Zn<sup>2+</sup> in hyperglycemic cardiomyocytes . Experimental Biology 2015, March 28- April 01, 2015, Boston, USA. Özet kitabı, 2015, Sayfa no. 404; Abst No: 951.2
165. Erkan Tuncay, Pauline Chabosseau, Alexander Lyon, Belma Turan, Guy A. Rutter. Dynamic imaging of compartmentalised intracellular free Zn<sup>2+</sup> concentrations in rat ventricular cardiomyocytes. Experimental Biology 2015, March 28- April 01, 2015, Boston, USA. Özet kitabı, 2015, Sayfa no. 404; Abst No: 951.3.
166. Esma N Okatan, Erkan Tuncay, Belma Turan. Depressed sarcoplasmic reticulum activity underlies Ca<sup>2+</sup> dyshomeostasis in a rat model of metabolic syndrome. Experimental Biology 2015, March 28- April 01, 2015, Boston, USA. Özet kitabı, 2015, Sayfa no. 404; Abst No: 951.6.
167. Gaye Hafez, Erkan Tuncay, Aysegul Toy, Belma Turan. The role of cross-links between endoplasmic reticulum stress, oxidative stress, and mitochondrial dysfunction in cardiomyocytes under hyperglycemia. Experimental Biology 2015, March 28- April 01, 2015, Boston, USA. Özet kitabı, 2015, Özet kitabı, 2015, Sayfa no. 437; Abst No: 1025.5.
168. Aysegul Toy, Esma N Okatan, Sinan Degirmenci, Belma Turan. Monitoring of intracellular free Zn<sup>2+</sup> and Ca<sup>2+</sup> changes in cardiomyocytes from metabolic syndrome rats. Experimental Biology 2015, March 28- April 01, 2015, Boston, USA. Özet kitabı, 2015, Sayfa no. 444; Abst No: 1042.4.
169. Sinan Degirmenci, Erkan Tuncay, Belma Turan. Roles of intracellular free Zn<sup>2+</sup> on electrical and mechanical activities of the heart. Experimental Biology 2015, March 28- April 01, 2015, Boston, USA. Özet kitabı, 2015, 444; Abst No: 1042.3.
170. Aysegul Toy, Figen Amber Çiçek, Erkan Tuncay, Belma Turan. ZIP7/ZnT7 Taşıyıcı Sisteminin Sarkoplazmik Retikulumu Lokalizasyonunun ve Endoplazmik Retikulum Stresi ile İlişkisinin Gösterilmesi. 27. Ulusal Biyofizik Kongresi Malatya 27 Eylül - 3 Ekim 2015. Özet kitabı sayfa no: 124.
171. Yusuf Olgar, Erkan Tuncay, Belma Turan. Yaşlanmaya bağlı kalbin elektriksel aktivitesinde gözlenen değişimlerin iyonik temelleri. 27. Ulusal Biyofizik Kongresi Malatya 27 Eylül - 3 Ekim 2015. Özet kitabı s: 118.
172. Sinan Değirmenci, Yusuf Olgar, Aysegül Toy, Belma Turan. H9c2 Ventrikül Hücre Hattında Glukoz ve İnsülinin Voltaj-bağımlı K+-Kanal Akımlarına Etkilerinin İncelenmesi. 27. Ulusal Biyofizik Kongresi Malatya 27 Eylül - 3 Ekim 2015. Özet kitabı sayfa no: 149.
173. Esma N. Okatan, Aysegül Toy, Belma Turan. Yüksek Sükrozla İndüklenen Metabolik Sendromlu Sıçanlarda Oluşan Kalp Fonksiyon Bozukluğunda Sarkoplazmik Retikulumun Rolü. 27. Ulusal Biyofizik Kongresi Malatya 27 Eylül - 3 Ekim 2015. Özet kitabı sayfa no: 40. 34
174. Erkan Tuncay, Guy Rutter, Belma Turan. Kardiyomiyositlerde hücre içi Zn<sup>2+</sup> depolarlarının floresans görüntüleme tekniği ile görüntülenmesi. 27. Ulusal Biyofizik Kongresi Malatya 27 Eylül - 3 Ekim 2015. Özet kitabı sayfa no: 38.
175. Erkan Tuncay, Guy Rutter, Belma Turan. The role of zinc transporter ZIP7 in regulation of intracellular free Zn<sup>2+</sup> level in cardiomyocytes. Workshop on COST Action TD1304 Zinc-Net, November 1-4, 2015 Antalya, Turkey. Abstract Book, pp. 07.

176. Erkan Tuncay, Aysegul Durak, Belma Turan. Zinc transporters and endoplasmic reticulum stress in human failing heart. Zinc-Net /Zinc-UK Conference, November 21-22, 2016, Belfast, UK. Abstract Book, pp. 05.
177. Erkan Tuncay, Verda Bitirim, Aysegul Durak, Gaelle RJ Carrat, Guy A Rutter, Belma Turan. Regulation of endoplasmic reticulum and mitochondrion free Zn<sup>2+</sup> level with ZIP7 in hyperglycemic cardiomyocytes. Zinc-Net /Zinc-UK Conference, November 21-22, 2016, Belfast, UK. Abstract Book, pp. 10.
178. Aysegul Durak, Yusuf Olgar, Belma Turan: Metabolik Sendrom İndüklü Kalp Fonksiyon Bozukluğunun Elektrofizyolojik Temelleri: İnsülin Uygulamasının Etkileri, Uluslararası Katılımlı 28-29. Ulusal Biyofizik Kongresi, 6-9 Eylül 2017, İstanbul.
179. Sinan Değirmenci, Yusuf Olgar, Belma Turan: The Effects of Intracellular Free Zn<sup>2+</sup> Increase on K<sup>+</sup> Currents and Arrhythmia in Ventricular Cardiomyocytes, Uluslararası Katılımlı 28-29. Ulusal Biyofizik Kongresi, 6-9 Eylül 2017, İstanbul.
180. Yusuf Olgar, Aysegül Durak, Belma Turan: Yaşlanma Sürecinde Kalbin Elektriksel Aktivitesinde Gözlenen Değişikliklerin İyonik Temelleri, Uluslararası Katılımlı 28-29. Ulusal Biyofizik Kongresi, 6-9 Eylül 2017, İstanbul.
181. Erkan Tuncay, Yusuf Olgar, Aysegül Durak, Sinan degirmenci, Belma Turan. Relationship between β-adrenergic receptor activation and negative inotropic effect on heart function via reactive nitrogen species associated with free Zn<sup>2+</sup> increase. IACS North American section meeting in XXX Congreso Centroamericano y del Caribe de cardiología IX Congreso Cubano de Cardiología, June 05-08, 2018, Havana, Cuba.
182. Deniz Billur, Pinar Bayram, Belgin Can, Belma Turan. An histological investigation of impact of the metabolic syndrome on myocardial structure at tissue and cell levels. IACS North American section meeting in XXX Congreso Centro. Caribe de cardiología IX Congreso Cubano de Cardio., June 05-08, 2018, Havana, Cuba.
183. Yusuf Olgar, Aysegul Durak, Sinan Degirmenci, Gizem Kayki Mutlu, Erkan Tuncay, Ebru Arioglu Inan, Belma Turan. Mitochondrial Zn<sup>2+</sup>-transporters ZIP7 and ZnT7 in isolated ventricular cardiomyocytes play important role in aging-related cardiac dysfunction via inducing increases in Zn<sup>2+</sup>-influx into cytoplasm. IACS North American section meeting in XXX Congreso Centroamericano y del Caribe de cardiología IX Congreso Cubano de Cardiología, June 05-08, 2018, Havana, Cuba.
184. Yusuf OLGAR, Erkan TUNCAY, Belma TURAN. Inhibition of protein kinase G preserves prolonged ventricular action potentials via improvement of slow-activated voltage-dependent K-channel currents in aged rat cardiomyocytes. 63rd Annual Meeting of the Biophysical Society, March 2-6, 2019, Baltimore, USA.
185. Erkan Tuncay, 63rd Annual Meeting of the Biophysical Society, March 2-6, 2019, Baltimore, USA.
186. Sinan Degirmenci, Aysegul Durak, Yusuf Olgar, Erkan Tuncay, Belma Turan. Effects of a SGLT2 inhibitor on intracellular ion levels and mitochondrial membrane potential in ventricular H9c2 cell line. European Society of Biophysics
187. Deniz Billur, Belgin Can, Belma Turan. Histological examination zinc effects on structure of cardiomyocytes depending on both compound types and their concentrations. "The 6th Meeting of International Society for Zinc Biology", 9-13.9.2019, Kyoto, Japan.
188. Boyar H. Turan B., Sevencan F. "Effects of selenium on Diabetic Rat Femur: An FTIR Study", 8th Inter. Conf. the Chemistry and Biology of Mineralized Tissues, October 17-22, 2004, Banff, Alberta, Canada Abstract Book: p:77.
189. Boyar, H., Turan, B. and Sevencan, F. "FTIR Spectroscopic Investigation of the Effects of Selenium on Streptozotocin Induced Diabetic Rat Femur and Tibia in the C-H Stretching Region" Second International Conference on Biomedical Spectroscopy, 5-8 July, 2003, London, U. K.

190. Boyar H., Turan B., Severcan F., "Comparison of streptozotocin-induced diabetic and control rat bones by Fourier transform infrared spectroscopy" Book of Abstract, p.116, 12 th BBBB Balkan Biochemical Biophysical Days, May 10-13, 2001, Bucharest, Romania.

191. Bayarı S., Boyar H., Turan B., and Severcan F., The effect of Selenium-vitamin E deficiency and selenium excess on bone mineral and amide matrix, measured by FTIR spectroscopy, EUCMOS XXV, Page 328, Abstract book, 27 Aug.-Sep.1, 2000, Coimbra, Portugal.

192. Severcan F., Toyran N., Kaptan N., and Turan B., "FTIR study of the effect of diabetes on rat liver and heart tissues in the C-H region", CSI XXXI, Sept.5-10, 1999

## Uluslararası Dergilerde Görevler

GÖREV DÖNEMİ	GÖREV ÜNVANI	DERGİ ADI
2020-	Yardımcı editör	The Anatolian J. Cardiology
2010-	Yardımcı Editör	Cardiovascular Toxicology
2005-	Bord üyesi	Biological Trace Element Res.
2008-	Bord Üyesi	Molecular and Cellular Biochemistry
2010-	Bord Üyesi	CV network

## Danışmanlık ve Panelistlik Aktiviteleri

- Reviewer and panelist in projects of TUBITAK
- Reviewer and panelist in EU F7 frame
- Reviewer and panelist in EU Horizon 2020
- Reviewer in Graduate School in Egypt
- Reviewer in Graduate School in India
- Reviewer in Research Unit of Israel
- Reviewer in Research Unit of Canada