

## Prof. AHMET KOÇ

### Personal Information

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**Address:** İnönü Üniversitesi, Tıp Fakültesi, Tıbbi Genetik A.D., Malatya

### International Researcher IDs

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Yoksis Researcher ID: 110769

### Education Information

Post Doctorate, The University of Nebraska-Lincoln, The Beadle Genetic Research Center, Genetics / Biochemistry, United States Of America 2001 - 2003

Doctorate, Oregon State University, Genetik, United States Of America 1998 - 2002

### Foreign Languages

English, C1 Advanced

### Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Medical Biology, Internal Medicine Sciences, Medical Genetics, Life Sciences, Biochemistry, Molecular Biochemistry, Molecular Biology and Genetics, Genetic Engineering, Genomics, Natural Sciences

### Academic Titles / Tasks

Professor, Inonu University, Tıp Fakültesi, Dahili Tıp Bilimleri, 2016 - Continues

### Academic and Administrative Experience

Izmir Institute Of Technology, Moleküler Biyoloji Ve Genetik, 2011 - 2016

### Courses

İLERİ HÜCRE BİYOLOJİSİ, Doctorate, 2017 - 2018, 2016 - 2017

Moleküler Genetik Teknikleri, Doctorate, 2017 - 2018

Diş Hekimliği Dönem-1 Komite-genetik, Undergraduate, 2016 - 2017

Moleküler Genetik-2, Postgraduate, 2016 - 2017

## Advising Theses

- KOÇ A., Biochemical characterizations of the short living yeast mutants that lack the genes of the mitochondrial electron transport system, Doctorate, I.ESMER(Student), 2016
- KOÇ A., Molecular and genetic investigation of aging: The role of mitochondrial metabolism genes on life span determination, Doctorate, A.MUID(Student), 2016
- KOÇ A., Characterization of short living yeast deletion mutants that lack mitochondrial carbohydrate metabolism genes., Doctorate, K.AVŞAR(Student), 2016
- KOÇ A., Elucidation of molecular mechanisms conferring arsenic tolerance to yeast cells, Postgraduate, E.IŞIK(Student), 2015
- KOÇ A., Identification of doxorubicin drug resistance mechanisms by using genomic techniques, Doctorate, A.BANU(Student), 2015
- KOÇ A., Characterization of drug resistance mechanism against antifungal agent voriconazole, Postgraduate, İ.ERCAN(Student), 2015
- KOÇ A., Elucidation of boron stress signaling pathways in yeast, Doctorate, İ.ULUIŞIK(Student), 2015
- KOÇ A., Identification of molecular resistance mechanisms against systemically used antifungal drugs, Amphotericin B and Caspofungin, Doctorate, Ç.IŞIK(Student), 2013
- KOÇ A., Proteomic analysis of boron stress response in yeast *saccharomyces cerevisiae*, Postgraduate, K.AVŞAR(Student), 2011
- KOÇ A., Regulation of human P53 tumor suppressor gene activity by thiol-dependent oxidoreductases, Postgraduate, G.BEKKİ(Student), 2011
- KOÇ A., Molecular mechanisms of boron toxicity and identification of boron metabolism genes, Postgraduate, İ.ULUIŞIK(Student), 2010
- KOÇ A., Assesment of chronological life span dependent molecular damages of *S. cerevisiae* deficient in mitochondrial antioxidant genes, Postgraduate, A.BANU(Student), 2009
- KOÇ A., Identification of mitochondrial electron transport chain mutations that effect ageing, Postgraduate, E.HACIOĞLU(Student), 2009
- KOÇ A., Redox regulation of human p53 tumor suppressor gene activity: identification of redox genes that play role in human p53 reporter gene activity, Postgraduate, B.ATAÇ(Student), 2008
- KOÇ A., Identification of genes that play role in boron metabolism, Postgraduate, A.KAYA(Student), 2008
- KOÇ A., Effects of deleting mitochondrial antioxidant genes on aging, Postgraduate, E.SELÇUK(Student), 2007

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

- I. **N-alkylbenzimidazole silver(I) complexes: Synthesis, biological evaluation and molecular docking study**  
Arı E., Şahin N., Üstün E., Dündar M., Karcı H., Özdemir İ., Koç A., Gürbüz N., Özdemir İ.  
POLYHEDRON, no. 1873-3719, pp.1873-3719, 2023 (SCI-Expanded)
- II. **Toll-interacting protein may affect doxorubicin resistance in hepatocellular carcinoma cell lines.**  
Demir A. B., Baris E., Kaner U. B., Alotaibi H., Atabey N., Koc A.  
Molecular biology reports, vol.50, no.10, pp.8551-8563, 2023 (SCI-Expanded)
- III. **Boron stress signal is transmitted through the TOR pathway.**  
Yilmaz İ. U., Koc A.  
Journal of trace elements in medicine and biology : organ of the Society for Minerals and Trace Elements (GMS), vol.79, pp.127222, 2023 (SCI-Expanded)
- IV. **Nephrotoxicity Development of a Clinical Decision Support System Based on Tree-Based Machine Learning Methods to Detect Diagnostic Biomarkers from Genomic Data in Methotrexate-Induced Rats**  
Cicek I. B., Colak C., Yologlu S., Kucukakcali Z., Ozhan O., Taslidere E., Danis N., Koc A., Parlakpınar H., Akbulut S.  
APPLIED SCIENCES-BASEL, vol.1, pp.1, 2023 (SCI-Expanded)

- V. **Melatonin Attenuates Cerebral Ischemia/Reperfusion Injury Through Suppressing Apoptosis and Inducing Autophagy**  
Yılmaz Ü., Tanbek K., Gül M., Koç A., Sandal S.  
NEUROENDOCRINOLOGY, vol.1, no.1, pp.1-10, 2023 (SCI-Expanded)
- VI. **Modeling Based on Ensemble Learning Methods for Detection of Diagnostic Biomarkers from LncRNA Data in Rats Treated with Cis-Platinum-Induced Hepatotoxicity.**  
Kucukakcali Z., Colak C., Gozukara Bag H. G., Balikci Cicek I., Ozhan O., Yildiz A., Danis N., Koc A., Parlakpinar H., Akbulut S.  
Diagnostics (Basel, Switzerland), vol.13, no.9, 2023 (SCI-Expanded)
- VII. **Effect of high-intensity exercise on endoplasmic reticulum stress and proinflammatory cytokine levels**  
Düzova H., Koç A., Taşlıdere A.  
SCIENCE AND SPORTS, vol.1, no.1, pp.1-10, 2023 (SCI-Expanded)
- VIII. **Novel benzimidazolium salts and their silver(I)-N-heterocyclic carbene complexes: synthesis, characterization and their biological properties**  
Belhi Z., Karci H., Dündar M., Gürbüz N., Özdemir İ., Koç A., Cherit A., Özdemir İ.  
JOURNAL OF COORDINATION CHEMISTRY, vol.76, no.1, pp.120-133, 2023 (SCI-Expanded)
- IX. **Global gene expression profiling in congenital diaphragmatic hernia (CDH) patients**  
GÜRÜNLÜOĞLU K., DÜNDAR M., Unver T., AKPINAR N., GÖKCE İ. K., Gurunluoglu S., DEMİRCAN M., KOÇ A.  
FUNCTIONAL & INTEGRATIVE GENOMICS, vol.22, no.3, pp.359-369, 2022 (SCI-Expanded)
- X. **Identification of novel arsenic resistance genes in yeast**  
Işık E., Balkan Ç., Karl V., Karakaya H. Ç., Hua S., Rauch S., Tamas M., Koç A.  
MICROBIOLOGYOPEN, vol.11, no.11:e1284., pp.1-16, 2022 (SCI-Expanded)
- XI. **Investigation of the Neuroprotective Effect of N-(p-aminocinnamoyl) Anthranilic Acid on Hippocampal Endoplasmic Reticulum Stress in WAG/Rij Rats with Absence Epilepsy**  
Kaya G. B., DÜZOVA H., Kaya M., DÜNDAR M., KOÇ A.  
ACTA PHYSIOLOGICA, vol.234, pp.13, 2022 (SCI-Expanded)
- XII. **Effects of Glucagon on Central Nervous System in Regulating Glucose Homeostasis in Rats**  
TANBEK K., YILMAZ Ü., GÜL S., KOÇ A., Gul M., SANDAL S.  
ACTA PHYSIOLOGICA, vol.234, pp.50, 2022 (SCI-Expanded)
- XIII. **Effects of Severe Aerobic Exercise on Endoplasmic Reticulum Stress and Cellular Damage**  
Korkmaz K., DÜZOVA H., Durmus K., KOÇ A., TAŞLIDERE A.  
ACTA PHYSIOLOGICA, vol.234, pp.37, 2022 (SCI-Expanded)
- XIV. **Preparation, Controlled Drug Release, and Cell Viability Evaluation of Tenofovir Alafenamide-Loaded Chitosan Nanoparticles**  
Ulu A., Sezer S. K., YÜKSEL Ş., KOÇ A., ATEŞ B.  
STARCH-STARKE, 2021 (SCI-Expanded)
- XV. **Silver (I)-N-heterocyclic carbene complexes: Synthesis and characterization, biological evaluation of Anti-Cholinesterase, anti-alpha-amylase, anti-lipase, and antibacterial activities, and molecular docking study**  
Sandeli A. E., Khiri-Meribout N., Benzerka S., GÜRBÜZ N., DÜNDAR M., Karci H., Bensouici C., Mokrani E. H., ÖZDEMİR İ., KOÇ A., et al.  
INORGANICA CHIMICA ACTA, vol.525, 2021 (SCI-Expanded)
- XVI. **New silver N-heterocyclic carbenes complexes: Synthesis, molecular docking study and biological activities evaluation as cholinesterase inhibitors and antimicrobials**  
Lasmari S., Ikhlef S., Boulcina R., Mokrani E. H., Bensouici C., GÜRBÜZ N., Dündar M., Karci H., ÖZDEMİR İ., KOÇ A., et al.  
JOURNAL OF MOLECULAR STRUCTURE, vol.1238, 2021 (SCI-Expanded)
- XVII. **Investigation of the cardiotoxic effects of parenteral nutrition in rabbits**  
GÜRÜNLÜOĞLU K., GÜL M., KOCBIYIK A., KOÇ A., ÜREMİŞ N., GURUNLUOGLU S., Bag H. G., Karaca Y., TAŞÇI A., Gul S., et al.

- JOURNAL OF PEDIATRIC SURGERY, vol.55, no.3, pp.465-474, 2020 (SCI-Expanded)
- XVIII. **The Effects of Different Burn Dressings on Length of Telomere and Expression of Telomerase in Children With Thermal Burns**  
GÜRÜNLÜOĞLU K., DEMİRCAN M., KOÇ A., KOÇBIYIK A., Taşçı A., Durmuş K., CAFEROĞLU GÜRÜNLÜOĞLU S., GÖZÜKARA BAĞ H. G.  
JOURNAL OF BURN CARE & RESEARCH, vol.40, no.3, pp.302-11, 2019 (SCI-Expanded)
- XIX. **A Rare Mosaic Karyotype of 45,X/46,X,psu idic(Y)(p11.32)/46, XY with SHOX Haploinsufficiency, External Male Genitalia, and Short Stature**  
Ekici C., Esener Z., KORKMAZ S., Salturk N., YÜKSEL Ş., KOÇ A.  
SEXUAL DEVELOPMENT, vol.13, no.1, pp.41-46, 2019 (SCI-Expanded)
- XX. **The importance of boron in biological systems**  
Uluisik I., KARAKAYA H. Ç., KOÇ A.  
JOURNAL OF TRACE ELEMENTS IN MEDICINE AND BIOLOGY, vol.45, pp.156-162, 2018 (SCI-Expanded)
- XXI. **Evidence for the Presence of a Second Electron Donor for Cytoplasmic Thioredoxins in the Yeast *S cerevisiae***  
KOÇ A.  
TURKISH JOURNAL OF BIOLOGY, vol.133, pp.133-135, 2017 (SCI-Expanded)
- XXII. **High-Copy Overexpression Screening Reveals PDR5 as the Main Doxorubicin Resistance Gene in Yeast**  
Demir A. B., Koc A.  
PLOS ONE, vol.10, no.12, 2015 (SCI-Expanded)
- XXIII. **Functional characterization of new mutations in Wilson disease gene (ATP7B) using the yeast model**  
Papur O. S., Terzioglu O., Koc A.  
JOURNAL OF TRACE ELEMENTS IN MEDICINE AND BIOLOGY, vol.31, pp.33-36, 2015 (SCI-Expanded)
- XXIV. **Absence of superoxide dismutase activity causes nuclear DNA fragmentation during the aging process**  
Muid K. A., Karakaya H. C., Koc A.  
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.444, no.2, pp.260-263, 2014 (SCI-Expanded)
- XXV. **Identification of respiratory chain gene mutations that shorten replicative life span in yeast**  
Hacioglu E., Demir A. B., Koc A.  
EXPERIMENTAL GERONTOLOGY, vol.47, no.2, pp.149-153, 2012 (SCI-Expanded)
- XXVI. **Boron Stress Activates the General Amino Acid Control Mechanism and Inhibits Protein Synthesis**  
Uluisik I., Kaya A., Fomenko D. E., Karakaya H. C., Carlson B. A., Gladyshev V. N., Koc A.  
PLOS ONE, vol.6, no.11, 2011 (SCI-Expanded)
- XXVII. **Roles of ATR1 paralogs YMR279c and YOR378w in boron stress tolerance**  
Bozdogan G. O., Uluisik I., Gulculer G. S., Karakaya H. C., Koc A.  
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.409, no.4, pp.748-751, 2011 (SCI-Expanded)
- XXVIII. **Thiol peroxidases mediate specific genome-wide regulation of gene expression in response to hydrogen peroxide**  
Fomenko D. E., Koc A., AGİSHEVA N., Jacobsen M., KAYA A., Malinouski M., Rutherford J. C., Siu K., Jin D., Winge D. R., et al.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.108, no.7, pp.2729-2734, 2011 (SCI-Expanded)
- XXIX. **Proteomic changes during boron tolerance in barley *Hordeum vulgare* and role of vacuolar proton translocating ATPase subunit E**  
KOÇ A.  
TURKISH JOURNAL OF BOTANY, vol.135, no.379, pp.379-388, 2011 (SCI-Expanded)
- XXX. **The roles of thiol oxidoreductases in yeast replicative aging**  
Hacioglu E., Esmer I., Fomenko D. E., Gladyshev V. N., Koc A.  
MECHANISMS OF AGEING AND DEVELOPMENT, vol.131, pp.692-699, 2010 (SCI-Expanded)
- XXXI. **Compartmentalization and Regulation of Mitochondrial Function by Methionine Sulfoxide Reductases**

## **in Yeast**

Kaya A, Koc A, Lee B. C., Fomenko D. E., Rederstorff M., Krol A., Lescure A., Gladyshev V. N.  
BIOCHEMISTRY, vol.49, no.39, pp.8618-8625, 2010 (SCI-Expanded)

- XXXII. **Assessment of chronological lifespan dependent molecular damages in yeast lacking mitochondrial antioxidant genes**  
Demir A. B., Koc A.  
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.400, no.1, pp.106-110, 2010 (SCI-Expanded)
- XXXIII. **Effect of Thioredoxin Deletion and p53 Cysteine Replacement on Human p53 Activity in Wild-Type and Thioredoxin Reductase Null Yeast**  
Stoner C. S., Pearson G. D., Koc A., Merwin J. R., Lopez N. I., Merrill G. F.  
BIOCHEMISTRY, vol.48, no.38, pp.9156-9169, 2009 (SCI-Expanded)
- XXXIV. **Identification of a Novel System for Boron Transport: Atr1 Is a Main Boron Exporter in Yeast**  
Kaya A., Karakaya H. C., Fomenko D. E., Gladyshev V. N., Koc A.  
MOLECULAR AND CELLULAR BIOLOGY, vol.29, no.13, pp.3665-3674, 2009 (SCI-Expanded)
- XXXV. **Functional Analysis of Free Methionine-R-sulfoxide Reductase from *Saccharomyces cerevisiae***  
Le D. T., Lee B. C., Marino S. M., Zhang Y., Fomenko D. E., Kaya A., Hacıoglu E., Kwak G., Koc A., Kim H., et al.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.284, no.7, pp.4354-4364, 2009 (SCI-Expanded)
- XXXVI. **Checkpoint deficient rad53-11 yeast cannot accumulate dNTPs in response to DNA damage**  
Koc A., Merrill G. F.  
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.353, no.2, pp.527-530, 2007 (SCI-Expanded)
- XXXVII. **Methionine sulfoxide reduction and the aging process**  
Koc A., Gladyshev V. N.  
BIogerontology: Mechanisms and Interventions, vol.1100, pp.383-386, 2007 (SCI-Expanded)
- XXXVIII. **Effects of deleting mitochondrial antioxidant genes on life span**  
ÜNLÜ E. S., Koc A.  
BIogerontology: Mechanisms and Interventions, vol.1100, pp.505-509, 2007 (SCI-Expanded)
- XXXIX. **Thioredoxin is required for deoxyribonucleotide pool maintenance during S phase**  
Koc A., Mathews C. K., Wheeler L. J., Gross M. K., Merrill G. F.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.281, no.22, pp.15058-15063, 2006 (SCI-Expanded)
- XL. **Methionine sulfoxide reductase regulation of yeast lifespan reveals reactive oxygen species-dependent and -independent components of aging**  
Koc A., Gasch A., Rutherford J., KIM H. Y., Gladyshev V.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.101, no.21, pp.7999-8004, 2004 (SCI-Expanded)
- XLI. **Hydroxyurea arrests DNA replication by a mechanism that preserves basal dNTP pools**  
Koc A., WHEELER L., MATHEWS C., Merrill G.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.279, no.1, pp.223-230, 2004 (SCI-Expanded)
- XLII. **Replication-independent MCB gene induction and deoxyribonucleotide accumulation at G(1)/S in *Saccharomyces cerevisiae***  
Koc A., Wheeler L., Mathews C., Merrill G.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.278, no.11, pp.9345-9352, 2003 (SCI-Expanded)
- XLIII. **Reaction mechanism, evolutionary analysis, and role of zinc in *Drosophila* Methionine-R-sulfoxide reductase**  
Kumar R., Koc A., Cerny R., Gladyshev V.  
JOURNAL OF BIOLOGICAL CHEMISTRY, vol.277, no.40, pp.37527-37535, 2002 (SCI-Expanded)
- XLIV. **Selenoprotein R is a zinc-containing stereo-specific methionine sulfoxide reductase**  
Kryukov G., Kumar R., Koc A., SUN Z., Gladyshev V.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.99, no.7, pp.4245-4250, 2002 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Overexpression of yeast YLR177w gene provides tolerance to antifungal drug tioconazole**  
Koç S., Işık Ö. A., Dünder M., Koç A.  
Annals of Medical Research, vol.29, no.11, pp.1273-1277, 2022 (Peer-Reviewed Journal)
- II. **Whole exome sequencing analysis for mutations in isolated type III biliary atresia patients**  
Gürünlüoğlu K., Koç A., Durmuş K., Gözükara Bağ H. G., Ceran Özcan C., Gürünlüoğlu S., Yıldız T., Gül M., Demircan M.  
Clinical and Experimental Hepatology, vol.6, no.4, pp.347-353, 2020 (ESCI)
- III. **[tRNA Wobble Base Modifications and Boric Acid Resistance in Yeast: Boron-Resistant Deletion Mutants Induce the General Amino Acid Control Mechanism and Activate Boron Efflux].**  
Uluşık I., Karakaya H. C., Koc A.  
Molekuliarnaia biologiya, vol.54, no.3, pp.450-456, 2020 (Peer-Reviewed Journal)
- IV. **DELETION OF MITOCHONDRIAL INORGANIC PYRO PHOSPHATASE GENE EXTENDS LIFE SPAN IN HAPLOID YEAST ( Saccharomyces cerevisiae )**  
KA M., KOÇ A.  
J. biodivers. conserv. bioresour. manag, vol.3, no.2, pp.60-75, 2017 (Peer-Reviewed Journal)
- V. **Regulation of Yeast Life Span by Autophagy Related Genes**  
ESMER DEMİRCİ İ., KARAKAYA H. Ç., KOÇ A.  
J. App. Biol. Sci, vol.9, no.2, pp.7-12, 2015 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Cellular Toxicity Mechanisms of Boron**  
Koç A., Uluşık İ.  
BORON22, İstanbul, Turkey, 5 - 07 October 2022, vol.1, no.1, pp.335-337
- II. **İnsan Akciğer Epitel Hücreleri ve Akciğer Kanseri Hücrelerinde Borik Asidin Endoplazmik Retikulum Stresi Üzerindeki Rolü**  
Koç A., Elmas F.  
Boron22, İstanbul, Turkey, 5 - 07 October 2022, vol.1, no.1, pp.388-389
- III. **Borik Asidin NF-Kb Sinyali İletim Yolağına Etkisinin NF-Kb-GFP Belirteç Sistemi Entegre Edilmiş Transgenik HEK293 Hücre Hattı Kullanılarak Çalışılması**  
Koç A., Yılmaz Dünder F.  
Boron22, İstanbul, Turkey, 5 - 07 October 2022, vol.1, no.1, pp.386-387
- IV. **Ag-NHC COMPLEX WITH ANTIMICROBIAL POTENTIAL**  
Karci H., Dünder M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.  
INTERNATIONAL GOBEKLITEPE APPLIED SCIENCES CONGRESS-IV, Şanlıurfa, Turkey, 9 - 11 September 2022, pp.24-25
- V. **Fonksiyonel Benzimidazolyum Tuzları ve Biyolojik Özellikleri**  
Karci H., Dünder M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.  
34. Ulusal Kimya Kongresi, Yalova, Turkey, 1 - 06 September 2022, pp.388
- VI. **Gümüş Karben Komplekslerinin Antimikrobiyal Özellikleri**  
Karci H., Dünder M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.  
34. Ulusal Kimya Kongresi, Şanlıurfa, Turkey, 1 - 06 September 2022, pp.389
- VII. **Yeni Ag-NHC Kompleksleri ve Özellikleri**  
Evren E., Karci H., Dünder M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.  
34. Ulusal Kimya Kongresi, Yalova, Turkey, 1 - 06 September 2022, pp.320
- VIII. **N-Alkilbenzimidazol-Gümüş Komplekslerinin Biyolojik Özellikleri**  
Arı E., Karci H., Dünder M., Özdemir İ., Şahin N., Koç A., Özdemir İ.  
34. Ulusal Kimya Kongresi, Yalova, Turkey, 1 - 06 September 2022, pp.321
- IX. **ANTIMICROBIAL PROPERTIES OF BENZIMIDAZOLIUM SALTS**

Karci H., Dündar M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.

INTERNATIONAL GOBEKLITEPE APPLIED SCIENCES CONGRESS-IV, Şanlıurfa, Turkey, 9 - 11 September 2022, pp.26-27

- X. **Investigation of the Neuroprotective Effect of N-(p-amylcinnamoyl) Anthranilic Acid on Hippocampal Endoplasmic Reticulum Stress in WAG/Rij Rats with Absence Epilepsy**  
Kaya G. B., Düzova H., Kaya M., Dündar M., Koç A.  
Türk Fizyolojik Bilimler Derneği 46. Ulusal Fizyoloji Kongresi, 8 - 10 October 2021, pp.15
- XI. **ETİLASETAL FONKSİYONLU GÜMÜŞ KARBEN KOMPLEKSLERİN ANTİMİKROBİYAL ÖZELLİKLERİ KARAKTERİZASYONU**  
Karci H., Dündar M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.  
VIII. Ulusal Anorganik Kimya Kongresi, Tekirdağ, Turkey, 2 - 05 September 2021, pp.101
- XII. **FONKSİYONEL BENZİMİDAZOLYUM TUZLARI VE BİYOLOJİK ÖZELLİKLERİ**  
Karci H., Dündar M., Özdemir İ., Gürbüz N., Koç A., Özdemir İ.  
VIII. Ulusal Anorganik Kimya Kongresi, Tekirdağ, Turkey, 2 - 05 September 2021, pp.104
- XIII. **Genotoxic and Mitotoxic Effects of Chitosan Nanoparticle Containing Tenofovir Alafenamide**  
SEZER S., YÜKSEL Ş., KOÇ A., ULU A., ATEŞ B.  
1182nd International Conferences on Medical and Health Science, Paris, France, 25 October 2021
- XIV. **BENZİMİDAZOLIUM SALT AND BIOLOGICAL PROPERTIES**  
Karci H., Dündar M., Gürbüz N., Özdemir I., Koç A.  
XXXI. NATIONAL CONGRESS OF THE TURKISH BIOCHEMICAL SOCIETY 2020, Gaziantep, Turkey, 18 - 20 December 2020, pp.30
- XV. **Silver N-Heterocyclic Carbene Complexes and their Antibacterial Properties**  
Karci H., Dündar M., Özdemir İ., Gürbüz N., Koç A.  
3rd International Conference on Physical Chemistry and Functional Materials, Malatya, Turkey, 22 - 24 September 2020, pp.26
- XVI. **The roles of mitochondrial metabolism genes PPA2, DSS1 and AFG3 in mitochondrial functions and cellular longevity**  
KOÇ A., Muid K. A.  
Molbiyokon-19, Ankara, Turkey, 27 - 29 September 2019
- XVII. **SİTOGENETİK VE MOLEKÜLER SİTOGENETİK ANALİZLER SONUCU 47,X,İDİC(Y)(Q11.22)X2 OLARAK TESPİT EDİLEN, NÖROMOTOR GECİKME VE DİSMORFOLOJİK BULGULARI OLAN BİR OLGU**  
EKİCİ C., KORKMAZ S., YÜKSEL Ş., KOÇ A.  
Uluslararası Katılımlı 13. Ulusal Tıbbi Genetik Kongresi, Antalya, Turkey, 7 - 11 November 2018, vol.1, pp.99
- XVIII. **Cytogenetic and Molecular Cytogenetic Analyses of a Case with 47, X, idic (Y) (q11.22)x2, Associated with Neuromotor Delay and Dysmorphology**  
Ekici C., KORKMAZ S., YÜKSEL Ş., KOÇ A.  
13th National Congress of Medical Genetics with International Participation, Antalya, Turkey, 7 - 11 November 2018, pp.99
- XIX. **Akut lenfoblastik lösemili bir vakada nadir (8;12) (q13;p13) translokasyonu**  
Ekici C., YÜKSEL Ş., KOÇ A.  
5. Uluslararası Katılımlı Deneysel Hematoloji Kongresi, Malatya, Turkey, 27 - 29 April 2018, pp.1
- XX. **Amfoterisin B, Kaspofungin ve Vorikonazol Mantar İlaçlarına Karşı Geliştirilen Dirençlilik Mekanizmalarının Aydınlatılması**  
ÇAKIROĞLU Ç., ercan i., sychrova h., KOÇ A.  
MOLEKÜLER BİYOLOJİ VE BİYOTEKNOLOJİKONGRESİ, Adana, Turkey, 5 - 07 October 2017
- XXI. **Study of human p53 regulation in yeast cells: Identification of yeast antioxidant genes that regulate p53 activity**  
KOÇ A., beki g., ataç b.  
SMYTE35 Konferansı, 17 - 21 September 2017
- XXII. **Identification of resistance mechanisms for systemically used antifungal drugs Amphotericin B Caspofungin and Voriconazole using the yeast model**

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**XXIII. Characterization of pollen e1 gene might play role in salt tolerance in Beta maritima**

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**XXIV. Characterization of drug resistance mechanisms against antifungal agent variconazole**

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4. Uluslararası Mol Biyol Kong, Turkey, 27 - 29 November 2015

**XXV. Novel Resistance mechanisms against two antifungal drugs**

IŞIK Ç., hana s., KOÇ A.

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**XXVI. Genome Wide Screening Reveals Pdr5 as the Main Transporter for Doxorubicin Resistance In Saccharomyces Cerevisiae**

DEMİR A. B., KOÇ A.

SMYTE-33, Lizbon, Portugal, 21 - 24 November 2015

## Supported Projects

KOÇ A., TUBITAK Project, p53 tümör süpresör protein ile etkileşen diğer proteinlerin bulunması, 2018 - Continues

KOÇ A., EU Supported Other Project, Metalloid toksisitesinin mekanizmalarının araştırılması, 2015 - Continues

TOPRAK S., KOÇ A., EREN Ş., Project Supported by Higher Education Institutions, Berrak Hücreli Renal Hücreli Karsinom Hastalarında BAP-1, PBRM-1, SETD-2 Mutasyonlarının Varlığının Araştırılması ve İmmünohistokimyasal Olarak Korelasyonunun Değerlendirilmesi, 2021 - 2022

DÜZOVA H., DURMAZ G., KOÇ A., GÜL M., ÖZER M. Y., ÖZDEN Ç., GÜL S., Project Supported by Higher Education Institutions, Kayısı Katkılı Sporcu İçeceği'nin Zorlu Egzersiz Yapılan Sıçanlarda Kardiyak Mitokondriyal Disfonksiyona Etkisi, 2021 - 2022

KOÇ A., YILMAZ F., Project Supported by Higher Education Institutions, Borik asitin NFB sinyal iletim yolağına etkisinin NFBGFP belirteç sistemi entegre edilmiş transgenik HEK293 hücre hattı kullanılarak çalışılması, 2021 - 2022

KOÇ A., İNALKAÇ GEMİCİ Y., Project Supported by Higher Education Institutions, İdiopatik Parkinson Hastalığının Patogenezinde Rol Alan Moleküler Yolaklarda Epigenetik Değişikliklerin Araştırılması, 2020 - 2022

İÇEN TAŞKIN I., KOÇ A., KOCABAY S., YOLBAŞ S., Project Supported by Higher Education Institutions, FMF Hastalarında SFK'ların Proinflamatuvar Sitokinler ve NLRP3 Regülasyonundaki Rollerinin Araştırılması, 2020 - 2022

YÜKSEL Ş., ATEŞ B., ULU A., KOÇ A., KORKMAZ S., Project Supported by Higher Education Institutions, Tenofovir Alafenamide TAF İçeren Kitosan Nanopartikülü Formülasyonlarının Hazırlanması, Genotoksik ve Mitotoksik Etkilerinin Araştırılması, 2018 - 2022

KOÇ A., KOÇ S., Project Supported by Higher Education Institutions, Yeni Nesil Triazole Gurubu Antifungal İlaçlardan Tiocanazole Dirençlilik Sağlayan Genlerin Bulunması, 2019 - 2020

KOÇ A., GÜRÜNLÜOĞLU K., DEMİRCAN M., Project Supported by Higher Education Institutions, BİLİYER ATREZİLİ HASTALARIN YENİ NESİL DNA DİZİ ANALİZİ YÖNTEMİYLE EKZOM SEKANSLARININ İNCELENMESİ, 2018 - 2019

KOÇ A., Project Supported by Higher Education Institutions, MEDİKAL GENOMİK VE PROTEOMİK ARAŞTIRMA LABORATUVARI ALTYAPISININ OLUŞTURULMASI, 2016 - 2018

KOÇ A., TUBITAK Project, Delesyonu Mayada Yaşam Süresini Uzatan Mitokondriyel Metabolizma Genlerinden Ppa2, Afg3 ve Dss1'e Ait Maya Mutantlarının Karakterizasyonu, 2015 - 2017

KOÇ A., TUBITAK Project, Doksorubisin dirençliliğinin genomik yöntemlerle belirlenmesi, 2014 - 2016

KOÇ A., TUBITAK Project, Doksorubisin İlaç Dirençlilik Mekanizmalarının Genomik Yöntemlerle Tespit Edilmesi, 2014 - 2015

KOÇ A., Other International Funding Programs, Sistemik Mantar İlaçlarına Karşı Gelişen İlaç Dirençlilik Mekanizmalarının Belirlenmesi, 2013 - 2015

KOÇ A., TUBITAK Project, Bor Toksisitesinin Moleküler Mekanizmalarının Araştırılması, 2011 - 2014

KOÇ A., TUBITAK Project, İnsan p53 Tümör Süpresör Gen Aktivitesinin Redoks Regülasyonu, 2008 - 2010



KOÇ A., TÜBİTAK Project, Borun Biyolojik Etki Mekanizması: Bor Metabolizmasında Rol Oynayan Genlerinin Tesbiti, 2005 - 2010

## **Memberships / Tasks in Scientific Organizations**

Uluslararası Projeler Araştırma Grubu, Consultant, 2021 - Continues, Turkey

## **Scientific Consultations**

TÜBİTAK, Scientific Consultancy, Inonu University, Tıp Fakültesi, Dahili Tıp Bilimleri, Turkey, 2021 - Continues

## **Metrics**

Publication: 77

Citation (WoS): 1361

Citation (Scopus): 1232

H-Index (WoS): 16

H-Index (Scopus): 16

## **Scholarships**

Yurtdışı Lisansüstü eğitim bursu, Ministry of Education, 1995 - 2001

## **Awards**

Koç A., Üstün Başarı, Fevzi Akkaya Bilimsel Etkinlikleri Destekleme Fonu- Famed, June 2012

Koç A., Üstün Başarılı Genç Bilim İnsanı, Türkiye Bilimler Akademisi, July 2007