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Publons / Web Of Science ResearcherID: GRO-6030-2022

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Education Information

Doctorate, Universitaed Heidelberg, Germany 2005 - 2009

Postgraduate, Ihsan Dogramaci Bilkent University, Institute Of Engineering And Natural Sciences, Moleküler Biyoloji Ve Genetik (YI) (Tezli), Turkey 2003 - 2005

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Science, Department Of Molecular Biology And Genetics, Turkey 1999 - 2003

Dissertations

Doctorate, FGF Signaling Couples Morphogenesis to Collective Cell Migration in the Zebrafish Lateral Line Primordium, Universitaed Heidelberg, 2009

Postgraduate, Evidence for a novel bacteriophage from Moraxella catarrhalis, Ihsan Dogramaci Bilkent University, Mühendislik Ve Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik (YI) (Tezli), 2005

Research Areas

Life Sciences, Molecular Biology and Genetics

Supervised Theses

ALOTAİBİ H., ÇAKAN AKDOĞAN G., Tumor mikroçevresi ve hücre dışı matriks keratan sülfat proteoglikan kompozisyonunun kanser metastazındaki rolünün araştırılması, Postgraduate, E.ERSÖZ(Student), 2023

ALOTAİBİ H., ÇAKAN AKDOĞAN G., Investigation of the role of extracellular matrix and tumor microenvironment keratan sulfate proteoglycan composition in cancer metastasis, Postgraduate, E.ERSÖZ(Student), 2023

Şentürk Ş., Çakan Akdoğan G., CAS9 sistemi ile oluşturulması ve mutantların fenotipik analizi, Postgraduate, M.BAŞOL(Student), 2022

Published journal articles indexed by SCI, SSCI, and AHCI

1. Loss of carbohydrate sulfotransferase 6 function leads to macular corneal dystrophy phenotypes

and skeletal defects in zebrafish

Çakan Akdoğan G.

THE FEBS JOURNAL, vol.291, no.23, pp.1-18, 2024 (SCI-Expanded)

- II. **Synthesis and Structure of Novel Phenothiazine Derivatives, and Compound Prioritization via In Silico Target Search and Screening for Cytotoxic and Cholinesterase Modulatory Activities in Liver Cancer Cells and In Vivo in Zebrafish**
KIŞLA M. M., Yaman M., Zengin-Karadayi F., Korkmaz B., Bayazeid O., Kumar A., Peravali R., Gunes D., Tiryaki R. S., Gelinci E., et al.
ACS Omega, vol.9, no.28, pp.30594-30614, 2024 (SCI-Expanded)
- III. **A novel 2-aminophenalenone-based fluorescent probe designed for monitoring H₂O₂ for in vitro and in vivo bioimaging**
Saygili E., Ersoz-Gulseven E., Kıbrıs E., ÇAKAN AKDOĞAN G., Uçuncu M.
Talanta, vol.271, 2024 (SCI-Expanded)
- IV. **Roadmap to DILI research in Europe. A proposal from COST action ProEuroDILINet**
Lucena M., Villanueva-Paz M., Alvarez-Alvarez I., Aithal G., Björnsson E., ÇAKAN AKDOĞAN G., Cubero F., Esteves F., Falcon-Perez J., Fromenty B., et al.
Pharmacological Research, vol.200, 2024 (SCI-Expanded)
- V. **Aronia melanocarpa (Michaux) Elliot Fruit Juice Attenuates Acetaminophen-induced Hepatotoxicity on Larval Zebrafish Model**
BİLGİ Ç., ÇAKAN AKDOĞAN G.
Tarim Bilimleri Dergisi, vol.30, no.3, pp.458-463, 2024 (SCI-Expanded)
- VI. **Dopamine-Conjugated Bovine Serum Albumin Nanoparticles Containing pH-Responsive Catechol-V(III) Coordination for In Vitro and In Vivo Drug Delivery**
Argitekin E., Ersoz-Gulseven E., ÇAKAN AKDOĞAN G., Akdogan Y.
BIOMACROMOLECULES, vol.24, no.8, pp.3603-3618, 2023 (SCI-Expanded)
- VII. **A zebrafish model for studying the mechanisms of newborn hyperbilirubinemia and bilirubin-induced neurological damage**
Guzelkaya M., Onal E., Gelinci E., Kumral A., Çakan Akdoğan G.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.11, 2023 (SCI-Expanded)
- VIII. **Synthesis of albumin nanoparticles in a water-miscible ionic liquid system, and their applications for chlorambucil delivery to cancer cells**
Akdogan Y., Sozer S. C., Akyol C., Basol M., Karakoyun C., Cakan-Akdogan G.
JOURNAL OF MOLECULAR LIQUIDS, vol.367, 2022 (SCI-Expanded)
- IX. **Effect of non-repetitive linker on in vitro and in vivo properties of an anti-VEGF scFv**
Arslan M., Karadag M., Onal E., Gelinci E., ÇAKAN AKDOĞAN G., Kalyoncu S.
SCIENTIFIC REPORTS, vol.12, no.1, 2022 (SCI-Expanded)
- X. **An in vivo zebrafish model reveals circulating tumor cell targeting capacity of serum albumin nanoparticles**
Cakan-Akdogan G., Ersoz E., Sozer S. C., Gelinci E.
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.75, 2022 (SCI-Expanded)
- XI. **Transcriptomics Profiling Identifies Cisplatin-Inducible Death Receptor 5 Antisense Long Non-coding RNA as a Modulator of Proliferation and Metastasis in HeLa Cells**
Gurer D. C., Erdogan I., Ahmadov U., Basol M., Sweef O., Cakan-Akdogan G., Akgul B.
FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY, vol.9, 2021 (SCI-Expanded)
- XII. **TAp73 β Can Promote Hepatocellular Carcinoma Dedifferentiation**
Iscan E., Ekin U., Yildiz G., Oz O., Keles U., Suner Karakulah A., Çakan Akdoğan G., Özhan H. G., Nekulova M., Vojtesek B., et al.
CANCERS, no.4, 2021 (SCI-Expanded)
- XIII. **A simple desolvation method for production of cationic albumin nanoparticles with improved drug loading and cell uptake**
Sozer S. C., Egesoy T. O., Basol M., ÇAKAN AKDOĞAN G., Akdogan Y.

JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, 2020 (SCI-Expanded)

- XIV. **lncRNA HOTAIR overexpression induced downregulation of c-Met signaling promotes hybrid epithelial/mesenchymal phenotype in hepatocellular carcinoma cells**
Topel H., Bagirsakci E., Comez D., Bagci G., ÇAKAN AKDOĞAN G., Atabey N.
CELL COMMUNICATION AND SIGNALING, no.1, 2020 (SCI-Expanded)
- XV. **Preparation of albumin nanoparticles in water-in-ionic liquid microemulsions**
Demirkurt B., ÇAKAN AKDOĞAN G., Akdogan Y.
JOURNAL OF MOLECULAR LIQUIDS, 2019 (SCI-Expanded)
- XVI. **THADA Regulates the Organismal Balance between Energy Storage and Heat Production**
Moraru A., ÇAKAN AKDOĞAN G., Strassburger K., Males M., Mueller S., Jabs M., Muelleder M., Frejno M., Braeckman B. P., Ralsler M., et al.
DEVELOPMENTAL CELL, vol.41, no.1, pp.72-87, 2017 (SCI-Expanded)
- XVII. **EPR studies of intermolecular interactions and competitive binding of drugs in a drug-BSA binding model**
Akdogan Y., Emrullahoglu M., Tatlidil D., Ucuncu M., ÇAKAN AKDOĞAN G.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS, no.32, pp.22531-22539, 2016 (SCI-Expanded)
- XVIII. **A guanidinium modified rhodamine-based fluorescent probe for *in vitro*/*in vivo* imaging of gold ions**
Karakus E., ÇAKAN AKDOĞAN G., Emrullahoglu M.
ANALYTICAL METHODS, no.19, pp.8004-8008, 2015 (SCI-Expanded)
- XIX. **Tissue-Specific Coupling between Insulin/IGF and TORC1 Signaling via PRAS40 in Drosophila**
Pallares-Cartes C., ÇAKAN AKDOĞAN G., Teleman A. A.
DEVELOPMENTAL CELL, vol.22, no.1, pp.172-182, 2012 (SCI-Expanded)
- XX. **Assessment of diagnostic enzyme-linked immunosorbent assay kit and serological markers in human brucellosis**
Cakan G., Bezirci F. B., Kacka A., Cesur S., Aksaray S., Tezeren D., Saka D., Ahmed K.
JAPANESE JOURNAL OF INFECTIOUS DISEASES, vol.61, no.5, pp.366-370, 2008 (SCI-Expanded)
- XXI. **Dynamic Fgf signaling couples morphogenesis and migration in the zebrafish lateral line primordium**
Lecaudey V., ÇAKAN AKDOĞAN G., Norton W. H. J., Gilmour D.
DEVELOPMENT, vol.135, no.16, pp.2695-2705, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **Periodate-Mediated Cross-Linking for the Preparation of Catechol Conjugated Albumin Nanoparticles Used for in Vitro Drug Delivery**
Argitekin E., Erez O., ÇAKAN AKDOĞAN G., Akdogan Y.
ACS Applied Bio Materials, 2025 (ESCI)
- II. **Roles of matrix metalloproteinases in the cornea: A special focus on macular corneal dystrophy**
Kaya S. G., Inanc-Surer S., ÇAKAN AKDOĞAN G., OKTAY G., Utine C. A., Kalyoncu S.
Medicine in Drug Discovery, vol.11, 2021 (Scopus)
- III. **Thioredoxin interacting protein promotes invasion in hepatocellular carcinoma**
Gunes A., Bagirsakci E., İŞCAN E., ÇAKAN AKDOĞAN G., aykutlu u., ŞENTÜRK Ş., ÖZHAN H. G., ERDAL BAĞRIYANIK Ş. E., NART D., YILMAZ BARBET F., et al.
Oncotarget, vol.9, no.96, 2018 (Scopus)

Books

- I. **Zebra balığı kanser modelleri ve kişiselleştirilmiş tıp uygulamaları**
Ersöz Gülseven E., ÇAKAN AKDOĞAN G.

Papers Published in Refereed Scientific Meetings

- I. **Escape from TGF- β -induced Senescence Promotes Aggressive Cancer Hallmarks in Epithelial Hepatocellular Carcinoma Cells**
Kalyoncu M., Demirci D., ERİŞ S., Uluata Dayanç B., ÇAKIROĞLU E., BAŞOL M., UYSAL M., ÇAKAN AKDOĞAN G., KARAKÜLAH G., ŞENTÜRK Ş.
The 2024 Annual Congress of the European Association for Cancer Research (EACR 2024), Rotterdam, Netherlands, 10 - 13 June 2024, vol.18, pp.347-348
- II. **A zebrafish model of macular cornea dystrophy provides the first preclinical test model**
Esra E. G., BAŞOL M., Gelinci E., KALYONCU UZUNLAR S., YILDIRIM C. A., ÇAKAN AKDOĞAN G.
ESGCT 30th Annual Congress, Brüksel, Belgium, 24 October 2023
- III. **Diclofenac Induced Liver Injury Assessment in Zebrafish Model**
KARAKOYUN Ç., ÇAKAN AKDOĞAN G.
International Congress of Medical and Health Sciences Studies, Ankara, Turkey, 13 - 14 December 2022, pp.119
- IV. **Modeling of rare disease in zebrafish through genetic modifications**
ÇAKAN AKDOĞAN G.
I. International Advances in Molecular Biology Congress, İstanbul, Turkey, 19 September 2022
- V. **Evaluation of drug induced liver injury (DILI) and systemic toxicity potentials of some marketed drugs on zebrafish model**
BİLGİ Ç., ÇAKAN AKDOĞAN G.
XVIth International Congress of Toxicology (ICT 2022) UNITING IN TOXICOLOGY, Netherlands, 18 - 21 September 2022
- VI. **Mimicking liver microenvironment employing three-dimensional in vitro and in vivo zebrafish models**
BAĞIRSAKÇI E., Korhan P., ÖZTEMUR ISLAKOĞLU Y., ÇAKAN AKDOĞAN G., ATABEY S. N.
EACR congress 2022, Innovative Cancer Science: Translating Biology to Medicine, Sevilla, Spain, 20 - 23 June 2022, vol.1
- VII. **Determination of a molecular signature to predict organ specific metastasis using HCC model**
ÇAKAN AKDOĞAN G., ATABEY S. N., Bağır sakçı E.
28TH CONGRESS OF THE EUROPEAN ASSOCIATION FOR CANCER, Sevilla, Spain, 20 - 23 June 2022
- VIII. **Determination of a molecular signature to predict organ-specific metastasis using HCC model**
Korhan P., BAĞIRSAKÇI E., ÖZTEMUR ISLAKOĞLU Y., ÇAKAN AKDOĞAN G., ATABEY S. N.
EACR 2022 Congress - Innovative Cancer Science: Translating Biology to Medicine, Sevilla, Spain, 20 - 23 June 2022
- IX. **Cisplatin-inducible DR5-AS lncRNA modulates proliferation, metastasis, and cisplatin sensitivity through CAPRIN1**
GÜRER D. C., KAÇAR V. İ., ERDOĞAN VATANSEVER İ., Ahmadov U., başol m., sweef o., ÇAKAN AKDOĞAN G., AKGÜL B.
MolBiyKon 2022, Turkey, 09 June 2022
- X. **Cisplatin-inducible DR5-AS lncRNA modulates proliferation, metastasis, and cisplatin sensitivity through CAPRIN1**
gurer d. c., Kaçar v. i., ERDOĞAN VATANSEVER İ., ahmadov u., basol m., sweef o., ÇAKAN AKDOĞAN G., AKGÜL B.
International Congress of the Molecular Biology Association of Turkey, İstanbul, Turkey, 09 June 2022
- XI. **Effects of inhibition of Wnt/beta-catenin pathway on Amacrine and Muller cells in retinas of zebrafish embryos at different development stages**
Alkan Yeşilyurt G., Çark Ö., Bostancı A., ÇAKAN AKDOĞAN G., AKYÜZ ÜNSAL A. İ., ERGİN K., ÖZKAVRUK ELİYATKIN N., ÖZHAN H. G.
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- XII. **Effects of inhibition of wnt/beta catenin pathway on amacrine and Muller cells in retinas of zebrafish embryos at different development stages**
Alkan Yeşilyurt G., Çark Ö., Bostancı A., ÇAKAN AKDOĞAN G., AKYÜZ ÜNSAL A. İ., ERGİN K., ÖZKAVRUK ELİYATKIN N., ÖZHAN H. G.
EVER congress, Italy, 02 October 2021, vol.100
- XIII. **HEPATOSELÜLER KARSİNOMADA YENİ YAKLAŞIM: POTANSİYEL İLAÇ HEDEFİ OLARAK AXL RESEPTÖRÜ**
Batur T., KELEŞ U., İŞCAN E., Öz Ö., ŞENTÜRK Ş., ÇAKAN AKDOĞAN G., mutlu z., ÖZTÜRK M.
Onkolojide İz Bırakanlar, Antalya, Turkey, 14 - 17 November 2019
- XIV. **TAP73'ün Hepatoselüler Karsinomada Pro-tümörojenik Rolü**
İŞCAN E., YILDIZ G., Öz Ö., EKİN U., KELEŞ U., KARAKÜLAH G., SUNER KARAKÜLAH A., ÇAKAN AKDOĞAN G., ÖZHAN H. G., ÖZTÜRK M.
ONKOLOJİDE İZ BIRAKANLAR ZİRVESİ, Antalya, Turkey, 14 - 17 November 2019
- XV. **Hepatoselüler Karsinoma'da AXL'in rolü**
Batur T., KELEŞ U., ŞENTÜRK Ş., ÇAKAN AKDOĞAN G., mutlu Z., İŞCAN E., ÖZTÜRK M.
16.Tıbbi Biyoloji ve Genetik Kongresi, 27 - 30 October 2019
- XVI. **TAp73'ün hepatoselüler karsinomada tümör teşvik edici rolü**
İŞCAN E., YILDIZ G., Öz Ö., Ekin U., Khoury N., KELEŞ U., KARAKÜLAH G., SUNER KARAKÜLAH A., ÇAKAN AKDOĞAN G., ÖZHAN H. G., et al.
16. Ulusal Tıbbi Biyoloji ve Genetik Kongresi (Uluslararası Katılımlı), Muğla, Turkey, 27 - 30 October 2019
- XVII. **TXNIP'xxin HCC gelişimi ve ilerleyişindeki rolü**
Güneş A., İŞCAN E., Bağırsakçı E., ÇAKAN AKDOĞAN G., aykutlu u., ŞENTÜRK Ş., ÖZHAN H. G., ERDAL BAĞRIYANIK Ş. E., NART D., Yılmaz Y., et al.
XV.Ulusal Tıbbi Biyoloji ve Genetik Kongresi, Turkey, 26 - 29 October 2017
- XVIII. **Thioredoxin interacting protein promotes aggressive phenotypes in hepatocellular carcinoma**
Güneş A., İşcan E., ÇAKAN AKDOĞAN G., Bağırsakçı E., NART D., YILMAZ BARBET F., ERDAL BAĞRIYANIK Ş. E., ÖZHAN H. G., ATABEY S. N.
FEBS Advanced Lecture Course on Oncometabolism, 18 - 24 June 2017
- XIX. **TXNIP overexpression promotes aggressive phenotype in HCC cell lines**
Güneş A., İŞCAN E., ÇAKAN AKDOĞAN G., Bağırsakçı E., ÖZHAN H. G., ERDAL BAĞRIYANIK Ş. E., NART D., YILMAZ BARBET F., ATABEY S. N.
EMBO Workshop Metabolic Disorders and liver cancer, 23 - 26 April 2017
- XX. **Polarising migrating tissues during organogenesis**
Gilmour D., Haas P., Cakan G., Lecaudey V., Colombelli J., Stelzer E.
Society for Developmental Biology 67th annual meeting, Philadelphia, United States Of America, 25 - 30 July 2008, pp.487-488

Supported Projects

- Sade Memişoğlu A., Çakan Akdoğan G., TUBITAK Project, Epitel Mezenkimal Plastisitede Polycomb Kompleksi Üyesi Cbx7 Ve Cbx8'in Karşıt Rollerini Ve Kanserde Hedflenebilirliği, 2023 - 2026
- Çakan Akdoğan G., Horizon Europe Project, Discovering chronic inflammation biomarkers that define key stages in the Healthy-to-NASH (non-alcoholicsteatohepatitis) transition to inform early prevention and treatment strategies, 2022 - 2026
- Çakan Akdoğan G., Kurt S., R&D Project of Group B, Over Kanseri Tedavisinde Kişiselleştirilmiş Tıp Uygulamaları için Zebra Balığı Hasta Kökenli Ksenograft Testi, 2022 - 2024
- Çakan Akdoğan G., Project Supported by Other Private Institutions, IBG-VSY Yenilikçi İlaç Geliştirme Sanayi Ar-Ge Projesi, 2020 - 2024
- Çakan Akdoğan G., Kumral A., TUBITAK Project, Zebra Balığı Organizmasında Özgün Bir Yenidoğan Hiperbilirubinemi Modelinin Geliştirilmesi, 2022 - 2023

Cilaker Mıçlı S., Çakan Akdoğan G., TUBITAK Project, Makuler Kornea Distrofisinin in vivo Modellemesi: Zebrabalğı mutantlarının CRISPR/Cas9 ile oluşturulması, CHST6'nın gelişimdeki rolünün ve MKD hastalık fenotipinin araştırılması, 2020 - 2023

Çakan Akdoğan G., TUBITAK Project, Karaciğer metastazı gelişiminde HGF/c-Met yolağının rolünün tümör mikroçevresini içeren koşullarda incelenmesi, 2020 - 2023

Çakan Akdoğan G., TUBITAK Project, Kanser Tedavisi İçin VEGF'e Bağlanan Yeni Nesil Rekombinant Antikor Parçacıklarının Geliştirilmesi , 2019 - 2022

Metrics

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