

Res. Asst. Özlem KAPLAN

Personal Information

Email: ozlem.kaplan@istanbul.edu.tr

International Researcher IDs

ORCID: 0000-0002-3052-4556

Publons / Web Of Science ResearcherID: A-8913-2018

Yoksis Researcher ID: 221508

Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Moleküler Biyoloji Ve Genetik, Turkey 2016 - 2022

Postgraduate, Tokat Gaziosmanpaşa University, Faculty Of Engineering And Natural Sciences, Turkey 2014 - 2016

Undergraduate, Tokat Gaziosmanpaşa University, Faculty Of Engineering And Natural Sciences, Turkey 2010 - 2014

Dissertations

Postgraduate, VİRAL TANI KİTLERİNİN GELİŞTİRİLMESİ İÇİN MOLONEY MURİNE LEUKEMİA VİRUS (MMLV) REVERS TRANSKRİPTAZ ENZİMİNİN REKOMBİNANT OLARAK ÜRETİLMESİ, Tokat Gaziosmanpaşa University, Graduate School Of Natural And Applied Sciences, 2016

Research Areas

Life Sciences, Molecular Biology and Genetics, Genetic Engineering, Natural Sciences

Academic Titles / Tasks

Research Assistant, Istanbul University, Institute of Graduate Studies In Sciences, Moleküler Biyoloji Ve Genetik, 2016 - Continues

Research Assistant, Alanya Alaaddin Keykubat University, Faculty Of Engineering, Department Of Bioengineering, 2016 - 2019

Research Assistant, Tokat Gaziosmanpaşa University, Faculty Of Engineering And Natural Sciences, 2015 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Development of recombinant protein-based nanoparticle systems for inducing tumor cell apoptosis: In vitro evaluation of their cytotoxic and apoptotic effects on cancer cells**
Kaplan Ö., GÖK M. K., PEKMEZ M., Erden Tayhan S., Özgümüş S., Gökçe İ., Arda N.
Journal of Drug Delivery Science and Technology, vol.95, 2024 (SCI-Expanded)
- II. **Thiolated α -cyclodextrin: The likely smallest drug carrier providing enhanced cellular uptake and endosomal escape**
Kaplan Ö., Truszkowska M., Kali G., Knoll P., Blanco Massani M., Braun D. E., Bernkop-Schnürch A.

Carbohydrate Polymers, vol.316, 2023 (SCI-Expanded)

- III. **Green synthesis of silver nanoparticles using *Macrolepiota procera* extract and investigation of their HSP27, HSP70, and HSP90 inhibitory potentials in human cancer cells**
Ozgur A., KAPLAN Ö., Tosun N. G., Turkecul I., Gokce I.
PARTICULATE SCIENCE AND TECHNOLOGY, vol.41, no.3, pp.330-340, 2023 (SCI-Expanded)
- IV. **Green synthesized silver nanoparticles with mushroom extracts of *Paxina leucomelas* and *Rhizopogon luteolus* induce ROS-Induced intrinsic apoptotic pathway in cancer cells**
Tosun N. G., KAPLAN Ö., Imamoglu R., Turkecul I., Gokce I., Ozgur A.
INORGANIC AND NANO-METAL CHEMISTRY, 2022 (SCI-Expanded)
- V. **Biosynthesis and characterization of silver nanoparticles from *Tricholoma ustale* and *Agaricus arvensis* extracts and investigation of their antimicrobial, cytotoxic, and apoptotic potentials**
KAPLAN Ö., Gökşen Tosun N., İmamoğlu R., Türkecul İ., Gökçe İ., Özgür A.
Journal of Drug Delivery Science and Technology, vol.69, 2022 (SCI-Expanded)
- VI. **Green synthesis of silver nanoparticles using *Schizophyllum commune* and *Geopora sumneriana* extracts and evaluation of their anticancer and antimicrobial activities**
Goksen Tosun N., Kaplan O., TÜRKEKUL İ., GÖKÇE İ., Ozgur A.
PARTICULATE SCIENCE AND TECHNOLOGY, vol.40, no.7, pp.801-811, 2022 (SCI-Expanded)
- VII. **Apoptosis Induced by *Tarantula cubensis* Crude Venom (Theranekron® D6) in Cancer Cells**
Gökşen Tosun N., Kaplan Ö., Özgür A.
Revista Brasileira De Farmacognosia-Brazilian Journal Of Pharmacognosy, vol.1, no.1, pp.1-8, 2021 (SCI-Expanded)
- VIII. **Microwave-assisted green synthesis of silver nanoparticles using crude extracts of *Boletus edulis* and *Coriolus versicolor*: Characterization, anticancer, antimicrobial and wound healing activities**
Kaplan Ö., Tosun N. G., Ozgur A., Tayhan S. E., BİLGİN S., TÜRKEKUL İ., GÖKÇE İ.
JOURNAL OF DRUG DELIVERY SCIENCE AND TECHNOLOGY, vol.64, 2021 (SCI-Expanded)

Articles Published in Other Journals

- I. **Polymer-Based Transfection Agents Used in CRISPR-CAS9 System**
İmamoğlu R., Kaplan Ö., Gök M. K., Gökçe İ.
Turkish Journal of Nature and Science, vol.11, no.1, pp.151-156, 2022 (Peer-Reviewed Journal)
- II. **Biosynthesis of Silver Nanoparticles Using White Propolis Extract as a Reduction Agent and Optimized by Box-Behnken Design**
Goksen Tosun N., Kaplan O.
KSU TARIM VE DOGA DERGISI-KSU JOURNAL OF AGRICULTURE AND NATURE, vol.25, no.5, pp.933-945, 2022 (ESCI)
- III. **Recombinant Production of *E. coli* NAD(+)-dependent DNA ligase as a Target for Antibacterial Drug Discovery**
KAPLAN Ö., Imamoglu R., Gokce I.
KSU TARIM VE DOGA DERGISI-KSU JOURNAL OF AGRICULTURE AND NATURE, vol.25, no.1, pp.19-24, 2022 (ESCI)
- IV. **High-Level Production of MMLV Reverse Transcriptase Enzyme in *Escherichia coli***
Kaplan Ö., İmamoğlu R., Gökçe İ.
International Journal of Advances in Engineering and Pure Sciences, vol.33, no.4, pp.549-555, 2021 (Peer-Reviewed Journal)
- V. **Development of a Fluorescent Protein Based FRET Biosensor for Determination of Protease Activity**
İncir İ., Kaplan Ö., Bilgin S., Gökçe İ.
SAUJS, vol.25, no.5, pp.1235-1244, 2021 (Peer-Reviewed Journal)
- VI. **The relationship between *DIRAS1* gene and idiopathic generalized epilepsy in the Turkish population**
Kaplan Ö., Pekmez M., Akinci Y., Atakli H. D., Eren F., Dirican A. C., Celik R. G. G., Gul Z. B., Ozcelik E. U., Gul G., et al.
GENE REPORTS, vol.23, 2021 (ESCI)
- VII. **Recombinant production and characterization of *Aspergillus niger* prolyl endopeptidase enzyme for**

gluten-free food production

Şenol Yılmaz B., Kaplan Ö., İmamoğlu R., Gökçe İ.

International Journal of Agriculture Environment and Food Sciences , vol.5, no.3, pp.287-293, 2021 (Peer-Reviewed Journal)

VIII. Optimization of the green synthesis of silver nanoparticle with Box-Behnken design: Using Aloe vera plant extract as a reduction agent

Gökşen Tosun N., Kaplan Ö.

SAUJS, vol.25, no.3, pp.787-800, 2021 (Peer-Reviewed Journal)

IX. Recombinant production of Thermus aquaticus single-strand binding protein for usage as PCR enhancer

Kaplan Ö., İmamoğlu R., Şahingöz İ., Gökçe İ.

International Advanced Researches and Engineering Journal, vol.5, no.1, pp.42-46, 2021 (Peer-Reviewed Journal)

X. Biosynthesis of silver nanoparticles from Teucroside and investigation of its antibacterial activity

Kaplan Ö., Gökşen Tosun N.

Cumhuriyet Science Journal , vol.42, no.1, pp.60-67, 2021 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. Development of One-Step RT-PCR Kit for Diagnosis of COVID-19

GÖKÇE İ., ÖZGÜR A., TAYHAN Y., KAPLAN Ö., GÖKŞEN TOSUN N., İMAMOĞLU R., ERDEN TAYHAN S., BİLGİN S.

3rd Eurasia Biochemical Approaches & Technologies Congress (EBAT), Antalya, Turkey, 4 November - 05 December 2021

II. Green Synthesis of Silver Nanoparticles Using Armillaria Mellea and Xerocomellus Chrysenteron Extracts and Evaluation of Their Antimicrobial and Anticancer Potentials

ÖZGÜR A., GÖKŞEN TOSUN N., KAPLAN Ö., TÜRKEKUL İ., GÖKÇE İ.

3rd Eurasia Biochemical Approaches & Technologies Congress (EBAT), Antalya, Turkey, 4 - 07 November 2021

III. Expression purification and characterization of recombinant proteinase K from Tritirachium Album Limber

İmamoğlu R., KAPLAN Ö., BİLGİN S., GÖKÇE İ.

Pichia 2016, 3 - 06 April 2016

IV. Expression of Thermus aquaticus single strand binding protein in Pichia pastoris for molecular biology applications

Şahingöz İ., KAPLAN Ö., BİLGİN S., ULUSU Y.

Pichia 2016, 3 - 06 April 2016

V. Production of recombinant UnaG fluorescent protein in Pichia pastoris for Improving BILIRUBIN biosensor

KAPLAN Ö., Bozkurt Y., ULUSU Y., GÖKÇE İ.

Pichia 2016, 3 - 06 April 2016

Supported Projects

ARDA E. Ş. N., PABUCCUOĞLU S. K., PEKMEZ M., KAPLAN Ö., MERTOĞLU E., GÖK M. K., GÖKÇE İ., Project Supported by Higher Education Institutions, Mcl-1 Protein İnhibitörü Yüklü Nanopartiküllerin Kansere Hücreleri Üzerindeki Sitotoksik ve Apoptotik Etkilerinin Araştırılması, 2019 - 2023

Özgür A., Kaplan Ö., Gökşen Tosun N., Project Supported by Higher Education Institutions, Yeni Nesil Hsp90 İnhibitörlerinin (Debio-0932 ve BIIB021) İnsan Kolorektal ve Karaciğer Kanseri Hücre Hatlarında Antikanser Özelliklerinin İncelenmesi , 2021 - 2022

Özgür A., Kaplan Ö., Türkekul İ., Gökşen Tosun N., Project Supported by Higher Education Institutions, Investigation of

Cytotoxic and Apoptotic Effects of Metallic Nanoparticles Synthesized with Lactarius Deliciosus Mushroom Extract on Breast Cancer , 2021 - 2022

Kaplan Ö., İmamoğlu R., Bilgin S., TUBITAK Project, Rekombinant İnsan Eritropoietinin E. coli Ekspresyon Sisteminde Çözünür Formda Eldesi, Saflaştırılması ve Karakterizasyonu, 2019 - 2020

Kaplan Ö., İmamoğlu R., Gökçe İ., Project Supported by Other Official Institutions, Hepatit B ve Hepatit C Hastalıkları İçin Tıbbi Tanı Kiti Yapımı, 2017 - 2020

Kaplan Ö., Project Supported by Other Official Institutions,

TANI KİTLERİNİN GELİŞTİRİLMESİ İÇİN TERS TRANSKRİPTAZ ve DNA POLİMERAZ ENZİMİNİN ÜRETİLMESİ, 2015 - 2016

KAPLAN Ö., TUBITAK Project, E.coli DNA Ligaz Enziminin Rekombinant Olarak Üretilmesi, Saflaştırılması ve Karakterizasyonu, 2013 - 2014

Patent

Kaplan Ö., Gökçe İ., Gök M. K., Pabuccuoğlu S. K., Arda E. Ş. N., Protein esaslı nanopartiküler sistemlerin sentezi, Patent, CHAPTER C Chemistry; Metallurgy, The Invention Recourse Number: 2022/012178 , Standard Registration, 2022

Metrics

Publication: 23

Citation (Scopus): 2

H-Index (Scopus): 1

Scholarships

2211-A Yurt İçi Doktora Burs Programı, TUBITAK, 2016 - Continues

2210-C Öncelikli Alanlara Yönelik Yurt İçi Yüksek Lisans Burs Programı, TUBITAK, 2015 - 2016

Awards

Kaplan Ö., KTÜ TTO Düşünden Gerçeğine Proje Pazarı Etkinliği, Ktü, June 2016

Kaplan Ö., Bölgesel İnovasyon Yarışması ve Proje Pazarı , Orta Karadeniz Kalkınma Ajansı, May 2015

Entrepreneurship Activities

Limited, Hidrogen Biyoteknoloji, 27 March 2017, Co-Founder

Other, oriGen Biyoteknoloji, 25 May 2015, Founder Owner