

Lect. PhD GÖNÜL SERDAR

Personal Information

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International Researcher IDs

ORCID: 0000-0002-3589-2323

Publons / Web Of Science ResearcherID: HJP-9568-2023

Yoksis Researcher ID: 246590

Education

Doctorate, Karadeniz Technical University, Fen Bilimleri, Kimya, Turkey 2010 - 2015

Postgraduate, Karadeniz Technical University, Fen Bilimleri, Kimya, Turkey 2008 - 2010

Undergraduate, Karadeniz Technical University, Orta Öğretim Fen-Matematik Alanları Eğitimi, Kimya Eğitimi, Turkey 1998 - 2003

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Measurement and Evaluation, Analitik Doğa Kümeleme ve Ordinasyon Teknikleri, Isparta Uygulamalı Bilimler Üniversitesi, 2023

Vocational Training, AAnalyst 400 Atomic Absorption Spectrometer, Karadeniz Teknik Üniversitesi, 2020

Quality Management, Temel Gereklilik ve İç Denetçi Eğitimi GMP/GLP Temel Gereklilik Eğitimi, ETC DANIŞMANLIK (DOKA katkısıyla), 2019

Quality Management, ISO13485, Temel Gereklilik ve İç Denetçi Eğitimi GMP/GLP Temel Gereklilik Eğitimi, ETC Eğitim Danışmanlık (DOKA katkısıyla), 2019

Quality Management, ISO17025, Temel Gereklilik ve İç Denetçi Eğitimi GMP/GLP Temel Gereklilik Eğitimi, ETC Eğitim Danışmanlık (DOKA katkısıyla), 2019

Quality Management, ISO31001 Temel Gereklilik ve İç Denetçi Eğitimi, ETC Eğitim Danışmanlık (DOKA katkısıyla), 2019

Quality Management, ISO27001, Temel Gereklilik ve İç Denetçi Eğitimi, ETC Eğitim Danışmanlık (DOKA katkısıyla), 2019

Quality Management, ISO9001, Temel Gereklilik ve İç Denetçi Eğitimi, ETC Eğitim Danışmanlık (DOKA katkısıyla), 2019

Education Management and Planning, • Tübitak, Fen Bilimlerinde Araştırma Projesi Hazırlama, KTÜ, 2014

Education Management and Planning, • Türk Patent Enstitüsü, KTÜ, 2012

Education Management and Planning, • Training in Metrology in Chemistry TrainMIC course, KTÜ, 2011

Education Management and Planning, • Ant Teknik Ultra Fast Likit Kromatografi- Kolonlar ve İleri Uygulama Teknikleri, KTÜ, 2010

Dissertations

Doctorate, YAŞ ÇAY VE SİYAH ÇAY ATIKLARINDAN MİKRODALGA YÖNTEMİ İLE KAFEİN VE KATEŞİNLERİN EKSTRAKSİYONU, Karadeniz Technical University, 2015

Postgraduate, Achillea biserrata VE Hyssopus officinalis TÜRLERİNİN ANTIOKSİDAN AKTİVİTELERİ VE FENOLİK BİLEŞEN ANALİZLERİ, Karadeniz Technical University, 2010

Research Areas

Chemistry, Analytical Chemistry, Separation Methods, Chromatographic Analysis, Microwave Spectroscopy, Spectroscopical Methods, Natural Sciences

Academic Positions

Lecturer PhD, Karadeniz Technical University, Temel Eczacılık, Analitik Kimya, 2016 - Continues

Journal articles indexed in SCI, SSCI, and AHCI

- I. **Biosynthesis and Characterization of Gold Nanoparticles Using Microwave-Assisted Technology from Pomegranate (*Punica granatum* L.) Leaf Extract Produced by the Method of Supercritical Fluid Extraction (SFE)**
Serdar G.
PLASMONICS, vol.19, no.4, pp.2233-2243, 2024 (SCI-Expanded)
- II. **Gold Nanoparticles Biosynthesis Through Green Synthesis Mediated by Leaf Extract from Diospyros Kaki L. (Persimmon) Using the Microwave Extraction Method**
Serdar G.
PLASMONICS, vol.19, no.5, pp.2813-2823, 2024 (SCI-Expanded)
- III. **Microwave assisted production and characterization of gold nanoparticles using green tea and catechin extracts obtained by supercritical extraction method**
SERDAR G., Kılınç G. G.
CHEMICAL PAPERS, vol.77, no.9, pp.5155-5167, 2023 (SCI-Expanded)
- IV. **Antioxidant Activity, Sugar Content and Phenolic Profiling of Blueberries Cultivars: A Comprehensive Comparison**
Okan O. T., Deniz İ., Yaylı N., Şat İ. G., Öz M., Hatipoğlu Serdar G.
NOTULAE BOTANICAE HORTI AGROBOTANICI CLUJ-NAPOCA, vol.46, pp.639-652, 2018 (SCI-Expanded)
- V. **Microwave assisted production of silver nanoparticles using green tea extracts**
Sokmen M., Alomar S. Y., Albay C., SERDAR G.
JOURNAL OF ALLOYS AND COMPOUNDS, vol.725, pp.190-198, 2017 (SCI-Expanded)
- VI. **In vitro antimicrobial, antioxidant, and antiviral activities of the essential oil and various extracts from *Thymus nummularis* M. Bieb.**
Bektas E., Daferera D., Sokmen M., SERDAR G., ERTURK M., Polissiou M. G., Sokmen A.
INDIAN JOURNAL OF TRADITIONAL KNOWLEDGE, vol.15, no.3, pp.403-410, 2016 (SCI-Expanded)
- VII. **Biological Activities of Extracts and Essential Oil of *Thymus transcaucasicus* Ronniger**
BEKTAŞ E., SERDAR G., Sokmen M., Sokmen A.
JOURNAL OF ESSENTIAL OIL BEARING PLANTS, vol.19, no.2, pp.444-453, 2016 (SCI-Expanded)
- VIII. **Automated and standard extraction of antioxidant phenolic compounds of *Hyssopus officinalis* L. ssp *angustifolius***
HATIPOĞLU G., Sokmen M., BEKTAS E., Daferera D., Sokmen A., DEMİR E., SAHİN H.

Articles Published in Other Journals

- I. **Biogenic Synthesis and Characterization of Gold Nanoparticles from Morus alba L. Leaves by Microwave Extraction Method**
SERDAR G.
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.11, no.2, pp.615-622, 2024 (Peer-Reviewed Journal)
- II. **Green Biosynthesis of Silver Nanoparticles were Obtained from the Extract of Pomegranate (Punica granatum L.) Leaves by Supercritical Extraction Using Microwave Method**
SERDAR G.
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.19, pp.351-358, 2023 (Peer-Reviewed Journal)
- III. **Microwave-assisted Green Biosynthesis of Gold Nanoparticles from Eriobotrya Japonica Leaf Extract**
Serdar G.
Bulletin of Biotechnology, vol.2, no.2, pp.38-43, 2021 (Peer-Reviewed Journal)
- IV. **Biosynthesis of Silver Nanoparticles Using Extract of Fig (Ficus carica) Leaf by Microwave Extraction**
SERDAR G.
Bulletin of Biotechnology, vol.2, no.2, pp.44-50, 2021 (Peer-Reviewed Journal)
- V. **Sequential Green Extraction of Caffeine and Catechins from Green Tea**
SERDAR G., AYTAÇ E., SÖKMEN M.
INTERNATIONAL JOURNAL OF SECONDARY METABOLITE, vol.6, no.3, pp.283-291, 2019 (Scopus)
- VI. **Comparison of Quorum Sensing Inhibition and Antimicrobial Properties of Some Commercial and Wild Mushrooms Extracted with Supercritical CO₂**
YILDIZ S., GÜRGEN A., TABBOUCHE S., SERDAR G., SÖKMEN M., KILIÇ A. O.
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.15, no.2, pp.193-198, 2019 (Peer-Reviewed Journal)
- VII. **Biosynthesis and Characterization of Silver Nanoparticles from the Lemon Leaves Extract**
SERDAR G., Albay C., SÖKMEN M.
CUMHURİYET SCIENCE JOURNAL, vol.40, no.1, pp.170-172, 2019 (Peer-Reviewed Journal)
- VIII. **Recycling of Tea Waste: Simple and Effective Separation of Caffeine and Catechins by Microwave Assisted Extraction (MAE)**
SERDAR G., Demir E., SÖKMEN M.
INTERNATIONAL JOURNAL OF SECONDARY METABOLITE, vol.4, no.2, pp.78-89, 2017 (Peer-Reviewed Journal)
- IX. **New approaches for effective microwave assisted extraction of caffeine and catechins from green tea**
SERDAR G., AYTAÇ E., BAYRAK S., SÖKMEN M.
INTERNATIONAL JOURNAL OF SECONDARY METABOLITE, vol.3, no.1, pp.3-13, 2016 (Peer-Reviewed Journal)
- X. **Comparison of Some Extraction Methods for Isolation of Catechins and Caffeine from Turkish Green Tea**
Aytaç E., Serdar G., Sökmen M.
INTERNATIONAL JOURNAL OF SECONDARY METABOLITE, vol.2, no.2, pp.16-25, 2015 (Scopus)
- XI. **Extraction of antioxidative principles of Achillea biserrata M. Bieb. and chromatographic analyses**
SERDAR G., SÖKMEN M., AYTAÇ E., SÖKMEN A., BEKTAŞ E.
INTERNATIONAL JOURNAL OF SECONDARY METABOLITE, vol.2, no.2, pp.3-15, 2015 (Peer-Reviewed Journal)

Papers Presented at Peer-Reviewed Scientific Conferences

- I. **Green synthesis of gold nanoparticles from Rubus fruticosus L. extract by microwave extraction**

method

Serdar G., Serdaroğlu V., Koç Keşir M.

6th International Environmental Chemistry Congress (EnviroChem), Trabzon, Turkey, 5 - 08 November 2024, pp.111, (Summary Text)

II. Green Synthesis of Gold Nanoparticles with Sorbus aucuparia L. fruit Extract

Serdar G.

7th International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2024), Ankara, Turkey, 2 - 04 October 2024, pp.226, (Summary Text)

III. Synthesis of Silver Nanoparticles Using Sorbus Aucuparia L. Extract

Serdar G.

II. INTERNATIONAL CONGRESS ON ADVANCED RESEARCH AND APPLICATIONS, Sivas, Turkey, 19 - 20 September 2024, pp.357, (Summary Text)

IV. Microwave-assisted Green Biosynthesis of Gold Nanoparticles from Eriobotrya Japonica Leaf Extract

SERDAR G.

4TH INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES, Turkey, 24 - 26 November 2021, (Summary Text)

V. Biosynthesis of Silver Nanoparticles Using Extract of Fig (Ficus carica) Leaf by Microwave Extraction

SERDAR G.

4TH INTERNATIONAL EURASIAN CONFERENCE ON BIOLOGICAL AND CHEMICAL SCIENCES(EURASIANBIOCHEM 2021), Turkey, 24 - 26 November 2021, (Summary Text)

VI. Microwave Assisted Production of Gold Nanoparticles From Catechin Extract

Serdar G., Gül Kılınç G., Sökmen M.

3rd International Congress on Analytical and Bioanalytical Chemistry (3rd ICABC 2021), Elazığ, Turkey, 22 - 26 March 2021, pp.55, (Summary Text)

VII. Microwave Assisted Production of Gold Nanoparticles From Catechin Extract

Serdar G., Kılınç G., Sökmen M.

3rd International Congress on Analytical and Bioanalytical Chemistry , Elazığ, Turkey, 22 - 26 March 2021, pp.55, (Summary Text)

VIII. Green Synthesis of Gold Nanoparticles Using Mulberry Leaf Extract

Serdar G.

3rd INTERNATIONAL CONGRESS on ANALYTICAL and BIOANALYTICAL CHEMISTRY, 22-26 March 2021, Elazığ, Turkey, 22 - 26 March 2021, pp.73, (Summary Text)

IX. Synthesis of Ag Nanoparticles from Catechin Extract of Green Tea leaf

Serdar G., Gül Kılınç G., Sökmen M.

NATURAL SCIENCES USBİK 2021, Kayseri, Turkey, 26 - 28 February 2021, pp.31, (Summary Text)

X. Synthesis and Characterization of Silver and Gold Nanoparticles Using Olea europaea Leaf Extract

Serdar G.

INTERNATIONAL EURASIAN CONFERENCE ON BIOTECHNOLOGY AND BIOCHEMISTRY, Ankara, Turkey, 16 December 2020 - 18 January 2021, pp.235, (Summary Text)

XI. Diopyros kaki L. (Trabzon Hurması) Yaprak Ekstresi Kullanarak Ag Nanopartikülün Sentez ve Karakterizasyonu

SERDAR G., ALBAY C., Sökmen M.

9. Ulusal Analitik Kimya Kongresi, Konya, Turkey, 19 - 23 September 2018, pp.69, (Full Text)

XII. Biosynthesis and Characterization of Silvernanoparticles from the Lemon Leaves Extract

Serdar G., Sökmen M., Albay C.

Es An 2018 Uluslararası Eser Analiz Kongresi, Konya, Turkey, 20 - 23 June 2018, (Summary Text)

XIII. Synthesis and Characterization of Silver Nanoparticles Using Green Tea

SERDAR G., ALBAY C., Sökmen M.

1 st International Congress on Medicinal and Aromatic Plants, Konya, Turkey, 9 - 12 May 2017, pp.1125, (Full Text)

XIV. Thymus transcaucasicus Türünün Uçucu Yağ Kompozisyonunun ve Antioksidan Aktivitesinin

Belirlenmesi

BEKTAŞ E., SERDAR G., BAKI H., SÖKMEN A.

1. Ulusal Bitki Biyolojisi Kongresi, Turkey, 2 - 04 September 2015, (Summary Text)

XV. **Sıçanlarda Methotrexate Kaynaklı Testis Hasarına Karşı Camellia Simensis (Yeşil Çay) Kateşinlerinin Antioksidan ve Antiapoptotik Etkileri**

Demir E., AKYOL M., YENİLMEZ E., SERDAR G., KAR F., AKYOL M., BAYRAK S., SÖKMEN M.

21. Bitkisel İlaç Hammaddeleri Toplantısı, Nevşehir, Türkiye, Nevşehir, Turkey, 28 May - 01 June 2014, (Summary Text)

XVI. **Microwave Assisted Extraction of Green Tea**

Sökmen M., Demir E., Serdar G.

6th Black Sea basin Conference on Analytical Chemistry, Trabzon, Turkey, 10 - 14 September 2013, pp.10, (Summary Text)

XVII. **Colchicum Autumnale L. Tohumundan Kolşisin İzolasyonu ve Saflaştırılması**

BAYRAK S., SÖKMEN M., SERDAR G., AYTAÇ E., Koç Keşir M., ALTIN İ.

Kromatografi Kongresi, Bursa, Turkey, 19 - 22 June 2013, pp.4, (Summary Text)

XVIII. **Bazı Verbascum Türlerinden Biyoaktif Bileşiklerin İzolasyonu ve Fenolik Bileşen İçerikleri'**

Demir E., Kar F., Serdar G., Sökmen M., Fatma Zerrin S., Şahin H.

Kromatografi 2011, Kongre bildiri özetleri kitapçığı, Diyarbakır, Turkey, 7 - 10 September 2011, pp.71, (Full Text)

XIX. **Antioxidant Activities, GS / MS Analysis and Phenolic Profiles of Achillea biserrata and Hysopus officinalis Extracts'**

SERDAR G., Demir E., Sökmen M., Sökmen A., Şahin H.

International Workshop on Antioxidant Capacity/Activity Assay Methods, İstanbul, Turkey, 21 April 2010, pp.28, (Full Text)

Funded Projects

Serdar G., Serdaroğlu V., Project Supported by Higher Education Institutions, Corylus maxima Millin Yapraklarından Mikrodalga Ekstraksiyon Metodu ile Elde Edilen Ekstraktlarından Ag ve Au Nanopartiküllerinin Sentezi Karakterizasyonu ve Antioksidan Aktivitesi, 2024 - 2026

Serdar G., Koç Keşir M., TUBITAK Project, Liliun Ciliatum Yaprak Ve Çiçeklerinin Süperkritik Akışkan Ekstraksiyon Yöntemiyle Ekstraksiyonu: Ekstraktan Gümüş Ve Altın Nanopartiküllerin Sentezi, Karakterizasyonu, Antioksidan Ve Antimikrobiyal Aktiviteleri, 2024 - 2025

SERDAR G., GÜL KILINÇ G., Project Supported by Higher Education Institutions, SÜPERKRİTİK AKIŞKAN EKTRAKSİYON METODU İLE ELDE EDİLEN YEŞİL ÇAY ÖZÜTLERİNDEN GÜMÜŞ VE ALTIN NANOPARTİKÜLLERİN SENTEZLENMESİ VE KARAKTERİZASYONU, 2019 - 2022

Deniz İ., Serdar G., Okan O. T., Sökmen M., Aytaç E., Industrial Thesis Project, Yeşil Çaydan Kateşinlerle Diğer Ürünlerin Makro Boyutta İzolasyonu Ve Çay Atıklarının Değerlendirilmesi, 2011 - 2013

Peer Reviews in Scientific Publications

Natural Product Research, SCI Journal, September 2017

International Journal of Secondary Metabolite, Other Indexed Journal, March 2017

Metrics

Publication: 38

Citation (WoS): 155

Citation (Scopus): 173

H-Index (WoS): 5

H-Index (Scopus): 5

Non Academic Experience

Özel Sınav Dershanesi, Kimya Öğretmenliği

Özel Hedef Dershanesi, Kimya Öğretmenliği