

## 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

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### Education Information

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

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 ileri 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 Titles / Tasks

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

## Published journal articles indexed by 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.0, no.0, 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***  
HATİPOĞLU G., Sokmen M., BEKTAS E., Daferera D., Sokmen A., DEMİR E., SAHİN H.  
INDUSTRIAL CROPS AND PRODUCTS, vol.43, pp.427-433, 2013 (SCI-Expanded)

## 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 CO<sub>2</sub>**  
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 (Peer-Reviewed Journal)
- 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)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **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
- II. **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
- III. **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
- IV. **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

- V. **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
- VI. **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
- VII. **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
- VIII. **Comparison of Quorum Sensing Inhibition and Antimicrobial Properties of Some Commercial and Wild Mushrooms Extracted with Supercritical CO<sub>2</sub>**  
YILDIZ S., GÜRGEN A., SANA T., GÖNÜL S., SÖKMEN M., KILIÇ A. O.  
1. INTERNATIONAL TECHNOLOGICAL SCIENCES AND DESIGN SYMPOSIUM, 27 - 29 June 2018, pp.610
- IX. **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
- X. **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
- XI. **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
- XII. **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
- XIII. **Türkiye den ihraç edilen Colchicum Tohumlarının İçeriğindeki Kolşisin Ekstraksiyonu ve Saflaştırılması**  
Demir E., BAYRAK S., SERDAR G., KAR F., SÖKMEN M.  
21. Bitkisel İlaç Hammaddeleri Toplantısı, Nevşehir, Türkiye, Nevşehir, Turkey, 28 May 2014
- XIV. **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
- XV. **Yeşil Çaydan Kateşinlerle Diğer Ürünlerin Makro Boyutta İzolasyonu Ve HP-TLC ile Analizleri**  
SERDAR G., SÖKMEN M., Demir E.  
Kromatografi Kongresi, 16-21 Haziran 2013 Uludağ Üniversitesi, Bursa., Bursa, Turkey, 21 June 2013
- XVI. **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
- XVII. **'Macro-Size Isolation of Catechins and Other Products from Green Tea and Chromatographic Analyzes'**  
SERDAR G., SÖKMEN M., Demir E.  
8th Aegean Analytical Chemistry Days conference from September, 16 - 20 September 2012
- XVIII. **Yeşil çaydan kateşinlerle diğer ürünlerin makro boyutta izolasyonu ve kromatografik yöntemlerle analizleri'**  
Demir E., SERDAR G., Sökmen M.  
VI. Ulusal Analitik Kimya Kongresi, Hatay, Turkey, 3 - 07 September 2012, pp.117
- XIX. **Yeşil Çaydan Mikrodalga Ekstraksiyonu İle Kateşin ve Kafeinin İzolasyonu**

Serdar G., Sökmen M., Demir E., Serdar B., Koç M.

VI. Ulusal Analitik Kimya Kongresi, Hatay, Turkey, 3 - 07 September 2012, pp.161

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

Demir E., KAR F., SERDAR G., Sökmen M., FATMA ZERRİN S., ŞAHİN H.

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

**XXI. 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

## Supported Projects

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., Okan O. T., Sökmen M., Industrial Thesis Project, Yeşil Çaydan Katesinlerle Diğer Ürünlerin Makro Boyutta İzolasyonu Ve Çay Atıklarının Değerlendirilmesi, 2011 - 2013

## Scientific Refereeing

Natural Product Research, SCI Journal, September 2017

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

## Metrics

Publication: 40

Citation (WoS): 136

Citation (Scopus): 159

H-Index (WoS): 5

H-Index (Scopus): 5

## Non Academic Experience

Özel Sınav Dershanesi

Özel Hedef Dershanesi