

## Asst. Prof. Semra ÇİÇEK

### Personal Information

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### International Researcher IDs

ScholarID: AMtTzeoAAAAJ

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Publons / Web Of Science ResearcherID: IYT-2631-2023

Yoksis Researcher ID: 273360

### Education Information

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Nanobilimve Nanomühendislik Bölümü/Nanobiyoteknoloji, Turkey 2014 - 2017

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Tarımsal Biyoteknoloji Bölümü/Hayvansal Biyoteknoloji, Turkey 2013 - 2016

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, Turkey 2009 - 2011

Undergraduate, Inonu University, Mühendislik Fakültesi, Gıda Mühendisliği, Turkey 2006 - 2009

### Foreign Languages

English, B1 Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, "Turkey in Horizon 2020" Project General Training, Atatürk Üniversitesi, 2017

Education Management and Planning, III. Uygulamalı Moleküler Biyoloji Teknikleri Lisansüstü Yaz Okulu, Atatürk Üniversitesi, 2016

Education Management and Planning, Deney Hayvanları Kullanım Sertifikası, Atatürk Üniversitesi, 2014

Education Management and Planning, TÜBİTAK 2237 Tarımsal Bilimlerde Araştırma Projesi Hazırlama Eğitimi, Erciyes Üniversitesi, 2014

Education Management and Planning, Patent Faydalı Model Eğitim Semineri, Atatürk Üniversitesi, 2014

### Dissertations

Postgraduate, Fe<sub>3</sub>O<sub>4</sub>, ZnO ve ZnO/Fe<sub>3</sub>O<sub>4</sub> Nanopartikülleri İmmobilize Luffa Sponge Lifleri Kullanılarak Atık Sulardan Trypan Blue ve Direct Blue 15 Azo Boyar Maddelerin Giderilmesi; Kinetik ve Denge Modellemesi , Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Nanobilim Ve Nanomühendislik Bölümü/Nanobiyoteknoloji, 2017

Doctorate, Paraoksonaz (PON1) Enziminin Üç Faz Ayrımı (ÜFA) Yöntemiyle Saflaştırılması, Karakterize Edilmesi ve Karadut (Moris nigra) Ekstraktları İmmobilize Edilmiş ?-Fe<sub>2</sub>O<sub>3</sub> Nanopartiküllerinin PON1, Glioblastoma ve Primer Rat Korteks Sinir Hücreleri Üzerine Etkilerinin Araştırılması , Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Tarımsal Biyoteknoloji Bölümü/Hayvansal Biyoteknoloji, 2016

Postgraduate, Microfluidizer, Ultrasound ve Yüksek Hidrostatik Basınç Uygulamalı Peyniraltı Suyu İlavesinin Ekmeğin Tekstür, Renk ve Bazı Kalite Parametreleri Üzerindeki Etkileri, Atatürk Üniversitesi, Fen Bilimleri Enstitüsü, Gıda Mühendisliği, 2011

## Research Areas

Agricultural Sciences, Agriculture, Life Sciences, Natural Sciences, Engineering and Technology

## Academic Titles / Tasks

Assistant Professor, Ataturk University, Ziraat Fakültesi, Tarımsal Biyoteknoloji, 2017 - 2018

## Courses

Akıllı Tarım, Undergraduate, 2022 - 2023

Agriculture Biotechnology, Undergraduate, 2022 - 2023

Hayvan Doku Kültürü Uyg, Undergraduate, 2023 - 2024

Bionanotechnology, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Cellular Signal , Postgraduate, 2021 - 2022

The Use of Nanotechnology in Agriculture, Postgraduate, 2020 - 2021, 2019 - 2020

Genotoxicology, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018

Animal Tissue Culture Applications, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019

Enzyme and Microbial Biotechnology, Undergraduate, 2019 - 2020

Organic and Inorganic Food Biotechnology, Undergraduate, 2019 - 2020

Biyoteknolojik Projeleme ve Değerlendirme II, Undergraduate, 2018 - 2019

Histology and Embryology, Undergraduate, 2017 - 2018

## Advising Theses

Çiçek S., Defneyapağı (*Lauris nobilis*) esansiyel yağının nanoemülsiyon formunun *sitophilus granarius*'a karşı insektisit etkisinin araştırılması, Postgraduate, C.SİRKE(Student), 2023

Çiçek S., RTG-2 Hücre Hattında Bakır II Oksit (CuO) Nanopartikül Toksikitesi Üzerine Resveratrolün Etkisinin Sitotoksitesite, Biyokimyasal ve Genotoksitesite Açısından Araştırılması, Postgraduate, S.İŞİK(Student), 2020

Çiçek S., *Ricania simulans*'ta Kitin Sentaz 1 Geninin Transkriptom Analizi, Postgraduate, S.TURHAN(Student), 2019

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

- A New Economical Route for the Grapefruit Peel Essential Oil: Nanoemulsion Form and Insecticidal Activity**  
Çiçek S., Bulak Korkmaz Y., Işık S.  
SOUTH AFRICAN JOURNAL OF BOTANY, vol.169, pp.56-65, 2024 (SCI-Expanded)
- Impacts of high-dose riboflavin on cytotoxicity, antioxidant, growth, reproductive gene expressions, and genotoxicity in the rainbow trout gonadal cells**  
Çiçek S., Işık S.  
TOXICOLOGY IN VITRO, vol.94, pp.1-9, 2024 (SCI-Expanded)
- Machine Learning Analysis of the Impact of Silver Nitrate and Silver Nanoparticles on Wheat (*Triticum aestivum* L.): Callus Induction, Plant Regeneration, and DNA Methylation**

Türkoğlu A., Haliloğlu K., Demirel F., Aydın M., Çiçek S., Yiğider E., Demirel S., Piekutowska M., Szulc P., Niedbała G. PLANTS-BASEL, vol.12, no.24, 2023 (SCI-Expanded)

- IV.  **$\alpha$ -tocopherol ameliorates copper II oxide nanoparticles-induced cytotoxic, biochemical, apoptotic, and genotoxic damages in the rainbow trout gonad cells-2 (RTG-2) culture**  
Çiçek S.  
ENVIRONMENTAL TOXICOLOGY AND PHARMACOLOGY, vol.101, no.2023, pp.1-10, 2023 (SCI-Expanded)
- V. **Nanotechnology-based preservation approaches for aquatic food products: A review with the current knowledge**  
Çiçek S., Özoğul F.  
CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION, vol.63, no.19, pp.3255-3278, 2023 (SCI-Expanded)
- VI. **Influences of L-ascorbic acid on cytotoxic, biochemical, and genotoxic damages caused by copper II oxide nanoparticles in the rainbow trout gonad cells-2**  
ÇİÇEK S.  
Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology, vol.266, 2023 (SCI-Expanded)
- VII. **Effects of selenium nanoparticles on growth performance, hematological, serum biochemical parameters, and antioxidant status in fish**  
ÇİÇEK S., ÖZOĞUL F.  
Animal Feed Science and Technology, vol.281, 2021 (SCI-Expanded)
- VIII. **Removing Trypan blue dye using nano-Zn modified Luffa sponge**  
NADAROĞLU H., ÇİÇEK S., GUNGOR A. A.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.172, pp.2-8, 2017 (SCI-Expanded)
- IX. **Immobilization of a thermostable phytase from Pinar melkior (Lactarius piperatus) onto magnetite chitosan nanoparticles**  
ONEM H., ÇİÇEK S., NADAROĞLU H.  
CYTA-JOURNAL OF FOOD, vol.14, no.1, pp.74-83, 2016 (SCI-Expanded)
- X. **The use of nanotechnology in the agriculture**  
ÇİÇEK S., NADAROĞLU H.  
ADVANCES IN NANO RESEARCH, vol.3, no.4, pp.207-223, 2015 (SCI-Expanded)
- XI. **Biochemical Evaluation and Green Synthesis of Nano Silver Using Peroxidase from Euphorbia (Euphorbia amygdaloides) and Its Antibacterial Activity**  
CICEK S., Gungor A., ADIGÜZEL A., NADAROĞLU H.  
JOURNAL OF CHEMISTRY, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Cytotoxicity of silver nanoparticles obtained from Eruca vesicaria on rainbow trout gonad cell line-2 (RTG-2)**  
Çiçek S.  
Gümüşhane Üniversitesi Fen Bilimleri Dergisi, vol.12, no.4, pp.1093-1101, 2022 (Peer-Reviewed Journal)
- II. **Effects of Ferulic Acid on Human Serum Paraoxonase Enzyme Purified by Three-Phase Partitioning**  
ÇİÇEK S.  
The World of Biomedical Technology, vol.1, no.1, pp.1-7, 2021 (Peer-Reviewed Journal)
- III. **Effects of Nanoparticles on Soil Microorganisms**  
ÇİÇEK S.  
World Journal of Agriculture and Soil Science, vol.6, no.5, pp.1-2, 2021 (Peer-Reviewed Journal)
- IV. **Küçükbaş ve Büyükbaş Hayvan Beslenmesinde Selenyum Nanopartikül Diyetlerinin Kullanımı**  
ÇİÇEK S., TURHAN S., IŞIK S.  
Atatürk Üniversitesi Ziraat Fakültesi Dergisi, 2021 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Food Quality 4.0: contribution to sustainability**  
Ait-Kaddour A., Boudalia S., Özoğul F., Çiçek S., Cahyana Y., Bhat Z. F.  
in: Food Industry 4.0 (Emerging Trends and Technologies in Sustainable Food Production and Consumption),  
Abdo HASSOUN, Editor, Academic Press , London, pp.35-59, 2024
- II. **semra çiçek semra çiçek GREEN SYNTHESIS OF METAL NANOPARTICLES USING PLANT MEDIA**  
Çiçek S., Işık S.  
in: The Trends In Nano Materials Synthesis And Applications, Tuba Çakıcı, Editor, Efe Akademi Yayınları, Ankara,  
pp.61-75, 2022
- III. **The Investigation of Removing Direct Blue 15 Dye from Wastewater Using Magnetic Luffa sponge NPs**  
NADAROĞLU H., ÇİÇEK S., ONEM H., GUNGOR A. A.  
in: Iron Ores and Iron Oxide Materials, Shotokha V., Editor, Intechopen, Londra, pp.207-228, 2018

## Refereed Congress / Symposium Publications in Proceedings

- I. **Cytotoxicity of Orange Peel (Citrus sinensis) Essential Oil Nanoemulsions on the Rainbow trout Gonadal Cells**  
ÇİÇEK S.  
V. International Agricultural, Biological & Life Science Conference, Edirne, Turkey, 18 - 20 September 2023
- II. **Effects of Microfluidization and Ultrasonication Pre-Treated Whey Addition on Some Quality Parameters of Bread**  
Çiçek S., Aydın F., Bozoğlu T. F.  
4TH INTERNATIONAL CONFERENCE ON FOOD, AGRICULTURE AND ANIMAL SCIENCES, Sivas, Turkey, 27 - 29 April 2023, pp.124-137
- III. **Nanoenkapsüle Edilmiş Bitkisel Kökenli Katkı Maddelerinin Kanatlı Beslemede Kullanımına Yönelik Çalışmalar**  
ÇİÇEK S., KILINÇ G.  
5th International Eurasian Congress on Natural Nutrition, Healthy Life & Sport, Ankara, Turkey, 2 - 06 October 2019, pp.387-394
- IV. **Studies on the Use of Nanoparticles in Reducing Methane Emission in Ruminant Animals**  
ÇİÇEK S., KILINÇ G.  
5th International Eurasian Congress on Natural Nutrition, Healthy Life & Sport, Ankara, Turkey, 2 - 06 October 2019, pp.792
- V. **POSITIVE AND NEGATIVE EFFECTS OF USING ZINC OXIDE NANOPARTICULES IN ANIMAL NUTRITION**  
Çiçek S.  
INTERNATIONAL ANKARA CONFERENCE OF SCIENTIFIC RESEARCH, Ankara, Turkey, 4 - 06 October 2019, pp.531-535
- VI. **EFFECTS OF USING COPPER NANOPARTICULES ON BROILER NUTRITION**  
Çiçek S.  
INTERNATIONALANKARACONFERENCEONSCIENTIFIC RESEARCHES, Ankara, Turkey, 4 - 06 October 2019, pp.527-530
- VII. **Çinko Oksit Nanopartiküllerin Hayvan Beslenmesinde Kullanımının Pozitif ve Negatif Etkileri**  
ÇİÇEK S.  
International Ankara Conference of Scientific Research, 4 - 06 October 2019
- VIII. **EFFECTS OF USING COPPER NANOPARTICLES ON BROILER NUTRITION**  
ÇİÇEK S.  
INTERNATIONAL ANKARA CONFERENCE ON SCIENTIFIC RESEARCHES, 04 October 2019
- IX. **Nano Agriculture: Risks**

Çiçek S.

3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.1157-1161

**X. Nano Agriculture: Opportunities**

Çiçek S.

3rd International Conference on Advanced Engineering Technologies, Bayburt, Turkey, 19 - 21 September 2019, pp.769-775

**XI. GREEN METHODS IN SYNTHESIS OF SEMICONDUCTOR NANOMATERIALS**

ÇİÇEK S., SARITAŞ S.

2nd International Congress on Semiconductor materials and Devices, 28 - 30 August 2018, pp.185-191

**XII. Design of nanoparticles on Membrane for Remove of Trypan Blue Azo Dye from Water**

ÇİÇEK S., ALAYLI GÜNGÖR A., NADAROĞLU H.

International Physics Conference at the Anatolian Peak, Erzurum, Turkey, 25 - 27 February 2016

**XIII. ZnO Nanoparticles Loaded on Membrane for Remove of Direct Blue 15 Azo Dye from Wastewater**

ÇİÇEK S., ALAYLI GÜNGÖR A., NADAROĞLU H.

IPCAP 2016. International Physics Conference at the Anatolian Peak, 25 - 27 February 2016

**XIV. The Application of Immobilized Nano-Zn on Luffa sponge for Remove Trypan Blue Dye from Water**

NADAROĞLU H., ÇİÇEK S., Babagil A.

Colloquium Spectroscopicum Internationale XXXIX, CSI 2015, 30 August - 03 September 2015

**XV. Euphorbia amygdaloides Bitkisinden Elde Edilen Peroksidaz Enzimi Kullanılarak Nano Gümüş ün Yeşil Sentezi Ve Karakterizasyonu**

ÇİÇEK S., NADAROĞLU H., ALAYLI GÜNGÖR A., ADIGÜZEL A.

27. ULUSAL KİMYA KONGRESİ, Turkey, 23 - 28 August 2015

**XVI. The Usage of Nano Ag Immobilized on Luffa sponge for Remove Direct Blue 15 Dye from Water 30 August 3 September 2015 PS2 36 212**

Çiçek S., NADAROĞLU H.

Colloquium Spectroscopicum Internationale XXXIX, CSI 2015, Figueira de Foz, Portugal, 30 August - 03 September 2015

**XVII. The Usage of Nano-Ag Immobilized on Luffa sponge for Remove Direct Blue 15 Dye from Water**

ÇİÇEK S., NADAROĞLU H.

Colloquium Spectroscopicum Internationale XXXIX, CSI 2015, Figueira Da Foz, Portugal, 30 August - 03 September 2015, pp.56

**XVIII. Euphorbia amygdaloides Bitkisinden Elde Edilen Peroksidaz Enzimi Kullanılarak Nano Gümüş'ün Yeşil Sentezi ve Karakterizasyonu**

ÇİÇEK S., NADAROĞLU H., ALAYLI GÜNGÖR A., ADIGÜZEL A.

27. Ulusal Kimya Kongresi, Turkey, 23 August - 28 July 2015

**XIX. Purification and Characterization of Phytase from Pinar Melkior (Lactarius piperatus) and Immobilization on the Surface of Modified Chitosan with Nano-Fe<sub>3</sub>O<sub>4</sub>**

NADAROĞLU H., ÇİÇEK S., ONEM H., Sönmez Z.

NanoNG2014, Elazığ, Turkey, 20 - 22 August 2014, pp.23

## Supported Projects

ÇİÇEK S., Project Supported by Higher Education Institutions, RTG2 Hücre Hattında Bakır II Oksit CuO Nanopartikül Toksikitesi Üzerine Tokoferol Etkisinin Sitotoksikite ve Biyokimyasal Açısından Araştırılması, 2021 - 2022

ÇİÇEK S., IŞIK S., Project Supported by Higher Education Institutions, RTG2 Hücre Hattında Bakır II Oksit CuO Nanopartikül Toksikitesi Üzerine Resveratrolün Etkisinin Sitotoksikite Biyokimyasal ve Genotoksikite Açısından Araştırılması, 2020 - 2022

ÇİÇEK S., TURHAN S., Project Supported by Higher Education Institutions, Ricania simulansta Kitin Sentaz 1 Geninin Moleküler Karakterizasyonu, 2019 - 2021

TAŞPINAR M. S., BAYIR M., ÇİÇEK S., İÇOĞLU AKSAKAL F., ORHAN E., AYDIN M., DİKBAŞ N., ÇİLTAŞ A., Project Supported by Higher Education Institutions, Tarımsal Biyoteknoloji Bölümünün Araştırma Altyapısı Yönünden Desteklenmesi, 2018 - 2021

TAŞPINAR M. S., ORHAN E., ÇİÇEK S., AYDIN M., İÇOĞLU AKSAKAL F., BAYIR M., DİKBAŞ N., ÇİLTAŞ A., Project Supported by Higher Education Institutions, Tarımsal Biyoteknoloji Bölümü Laboratuvar Altyapısını Güçlendirme Projesi, 2018 - 2021

NALCIOĞLU A. U., TOPU F. B., ELMAS S., ADIGÜZEL M. C., KÖSE M., EJDER APAY S., OZAN C., GÜR E. Y., ÖZSOY D., KIYAK E., et al., Project Supported by Higher Education Institutions, Atatürk Üniversitesi Akademisyenlerinin Yabancı Dil Yeterliliklerinin Geliştirilmesi, 2018 - 2020

## Activities in Scientific Journals

Committee Member, 2021 - Continues

## Scientific Refereeing

FOOD BIOSCIENCE, SCI Journal, December 2023

FOOD BIOSCIENCE, SCI Journal, November 2023

FOOD BIOSCIENCE, SCI Journal, September 2023

FOOD BIOSCIENCE, SCI Journal, September 2023

FOOD BIOSCIENCE, SCI Journal, August 2023

FOOD BIOSCIENCE, SCI Journal, August 2023

FOOD BIOSCIENCE, SCI Journal, August 2023

REVIEWS IN AQUACULTURE, SCI Journal, July 2023

FOOD BIOSCIENCE, SCI Journal, June 2023

FOOD BIOSCIENCE, SCI Journal, May 2023

INDUSTRIAL CROPS AND PRODUCTS, SCI Journal, April 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023

TUBITAK Project, 2209-A - Üniversite Öğrencileri Araştırma Projeleri Destekleme Programı, Ataturk University, Turkey, February 2023  
FOOD BIOSCIENCE, SCI Journal, January 2023  
FRONTIERS IN NUTRITION, SCI Journal, April 2022  
FOOD BIOSCIENCE, SCI Journal, March 2022  
FOOD BIOSCIENCE, SCI Journal, January 2022  
FOOD BIOSCIENCE, SCI Journal, January 2022  
FOOD BIOSCIENCE, SCI Journal, December 2021  
FOOD BIOSCIENCE, SCI Journal, November 2021  
FOOD BIOSCIENCE, SCI Journal, November 2021  
FOOD BIOSCIENCE, SCI Journal, November 2021  
FOOD BIOSCIENCE, SCI Journal, September 2021  
Journal Of Agricultural Science And Technology, Other Indexed Journal, June 2021  
FOOD BIOSCIENCE, SCI Journal, May 2021  
FOOD BIOSCIENCE, SCI Journal, March 2021  
Gümüşhane Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, December 2020  
FOOD BIOSCIENCE, SCI Journal, November 2020  
FOOD BIOSCIENCE, SCI Journal, October 2020  
Kommagene Biyoloji Degisi, Other Journals, September 2020

## **Scientific Research / Working Group Memberships**

Sourdomics Ca18101, Universidade de Minho, Portekiz, <https://sourdomics.com/>, 2021 - 2023

## **Metrics**

Publication: 38  
Citation (WoS): 194  
Citation (Scopus): 127  
H-Index (WoS): 6  
H-Index (Scopus): 5

## **Congress and Symposium Activities**

2. rd. International congress on semiconductor materials and devices, Attendee, Ardahan, Turkey, 2018