

## Res. Asst. Gamze DEMİREL ŞAHİN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Bioengineering, Turkey 2021 - Continues

Postgraduate, Istanbul Technical University, Lisansüstü Eğitim Enstitüsü, Biomedical Engineering, Turkey 2018 - 2021

Undergraduate, Erciyes University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, Turkey 2013 - 2018

### Dissertations

Postgraduate, Non-Convex Anisotropic Total Variation Regularized 3D Digital Breast Tomosynthesis Imaging, Istanbul Technical University, Fen Bilimleri Enstitüsü, Biomedical Engineering, 2021

### Research Areas

Health Sciences, Engineering and Technology

### Academic Titles / Tasks

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Biomedical Engineering, 2020 - Continues

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

- Practical SERS substrates by spray coating of silver solutions for deep learning-assisted sensitive antigen identification**  
Sahin F., Demirel Şahin G., Camdal A., Akmayan İ., Ozbek T., Acar S., Onses M. S.  
Colloids and Surfaces A: Physicochemical and Engineering Aspects, vol.707, 2025 (SCI-Expanded)
- Antimicrobial, anti-biofouling, antioxidant, and biocompatible fabrics with high durability via green growth of trimetallic nanoparticles**

DEMİREL ŞAHİN G., Sahin F., BARLAS F. B., ÖNSES M. S., ACAR S.

Materials Today Communications, vol.41, 2024 (SCI-Expanded)

**III. Resolution aware nonconvex quasinorm iterative digital breast tomosynthesis imaging**

DEMİREL ŞAHİN G., Ertas M., Yıldırım İ.

Biomedical Signal Processing and Control, vol.85, 2023 (SCI-Expanded)

**IV. Disintegration and Machine-Learning-Assisted Identification of Bacteria on Antimicrobial and Plasmonic Ag-CuxO Nanostructures**

Sahin F., Camdal A., Demirel Sahin G., Ceylan A., Ruzi M., Onses M. S.

ACS Applied Materials and Interfaces, vol.15, no.9, pp.11563-11574, 2023 (SCI-Expanded)

## Papers Published in Refereed Scientific Meetings

**I. Liken Ekstraktı ile Zenginleştirilmiş Antioksidan Özellikli Elektro Eğrilmiş Yara Örtülerinin Geliştirilmesi**

Işık E. D., Demirel Şahin G., Acar S.

IX. Polymer Science and Technology Congress, Ankara, Turkey, 16 - 18 September 2024, pp.149

**II. Highly durable antibacterial surface through in- situ grown copper nanoparticles for biomedical applications**

Sahin F., Demirel Sahin G., Ceylan A., Önses M. S.

2022 Medical Technologies Congress (TIPTEKNO), Antalya, Turkey, 31 October - 02 November 2022, pp.73-76

**III. Directional Total Variation Regularized Breast Tomosynthesis Image Reconstruction**

Demirel Sahin G., Sahin F., Ertas M., Yıldırım İ.

2022 Medical Technologies Congress (TIPTEKNO), Antalya, Turkey, 31 October - 02 November 2022, pp.145-148

**IV. P Norm Regularized Breast Tomosynthesis Image Reconstruction**

Demirel G., Yıldırım İ., Ertas M.

2021 Medical Technologies Congress, TIPTEKNO 2021, Antalya, Turkey, 4 - 06 November 2021

**V. EXAMINING THE DEVELOPMENT OF GRAY AND WHITE MATTER IN BRAIN ACCORDING TO AGE**

İçer S., Demirel G., Uysal N.

II. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS (BILMES 2018), Nevşehir, Turkey, 5 - 07 July 2018, pp.730-734

## Supported Projects

Demirel Şahin G., Derman S., Önses M. S., Şahin F., Emergency R&D Project of Group A, Yara Örtüsü Olarak Işık Geçirgen ve Antimikrobiyal Nitelikte Geçici Dövmelerin Geliştirilmesi, 2024 - 2025

Demirel Şahin G., Derman S., Önses M. S., Şahin F., TUBITAK Project, Makine Öğrenmesi Destekli Yüzeyde Zenginleştirilmiş Raman Saçılması ile Tiroid Kanseri Tanısına Yeni Bir Yaklaşım, 2024 - 2025

## Metrics

Publication: 9

Citation (Scopus): 21

H-Index (Scopus): 2