

## Asst. Prof. SİNEM GÜRKAN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 2010 - 2016

Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), Turkey 2007 - 2010

Undergraduate, Suleyman Demirel University, Fen-Edebiyat Fakültesi, Fizik Bölümü, Turkey 2003 - 2007

### Dissertations

Doctorate, Hartree-fock ve yoğunluk fonksiyon teori metodlarıyla  $\alpha$ -fenil-N-ter-bütil nitrene tarafından tuzaklanmış bazı radikallerin elektron paramagnetik rezonans analizleri, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik (Dr), 2016

Postgraduate, Al/PNpClPhPPy/p-Si/Al kontaklı elektronik özellikleri, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Fizik (YI) (Tezli), 2010

### Research Areas

Physics, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Istanbul Gelisim University, FACULTY OF APPLIED SCIENCES, AIRCRAFT MAINTENANCE AND REPAIR, 2016 - Continues

### Academic and Administrative Experience

Akran Mentor Komisyon Başkanı, Istanbul Gelisim University, FACULTY OF APPLIED SCIENCES, AIRCRAFT MAINTENANCE AND REPAIR, 2023 - Continues

Head of Department, Istanbul Gelisim University, FACULTY OF APPLIED SCIENCES, AIRCRAFT MAINTENANCE AND REPAIR, 2017 - Continues

### Courses

FİZİK I(Havacılık Elektrik ve Elektronik), Undergraduate, 2021 - 2022

FİZİK I (Uçak Bakım ve Onarım), Undergraduate, 2021 - 2022  
FİZİK(Sağlık Bilimleri Fakültesi), Associate Degree, 2021 - 2022  
FİZİK, Associate Degree, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
SES FİZİĞİ VE AKUSTİK, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
SES FİZİĞİ VE AKUSTİK PRENSİPLER, Associate Degree, 2021 - 2022, 2020 - 2021, 2018 - 2019, 2016 - 2017  
FİZİK VE GEOMETRİK OPTİK, Associate Degree, 2020 - 2021, 2019 - 2020, 2017 - 2018, 2016 - 2017  
FİZİK I, Undergraduate, 2020 - 2021, 2019 - 2020  
BİYOFİZİK, Undergraduate, 2020 - 2021  
FİZİK II, Undergraduate, 2020 - 2021, 2019 - 2020  
MESLEKİ UYGULAMALAR, Associate Degree, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017  
FİZİK, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018  
RADYASYON GÜVENLİĞİ VE KORUNMASI, Associate Degree, 2019 - 2020, 2017 - 2018  
GÖRME OPTİĞİ II, Associate Degree, 2018 - 2019, 2016 - 2017  
RADYOTERAPİDE KALİTE GÜVENLİĞİ, Associate Degree, 2018 - 2019, 2017 - 2018  
Radyasyon Güvenliği ve Korunması, Associate Degree, 2018 - 2019  
GÖRME OPTİĞİ I, Associate Degree, 2017 - 2018, 2016 - 2017

## Articles Published in Other Journals

- I. **Geometric Modelling and Analysis of the Amino Acid: Phenylalanine**  
Özgen A., Gürkan Aydın S.  
International Journal of Advances in Scientific Research and Engineering, vol.9, no.5, pp.43-47, 2023 (Peer-Reviewed Journal)
- II. **Bio-Based Jet Fuel Production by Transesterification of Nettle Seeds**  
Gürkan Aydın S., Özgen A.  
ENGINEERING TECHNOLOGY & APPLIED SCIENCE RESEARCH, vol.13, no.1, pp.10116-10120, 2023 (Scopus)
- III. **Review on Molecular Modeling and Docking**  
GÜRKAN AYDIN S.  
SAR JOURNAL - SCIENCE AND RESEARCH, vol.5, no.4, pp.206-210, 2022 (Peer-Reviewed Journal)
- IV. **Analysis of Modern Aviation Fuels: A Review of Environment Effect**  
GÜRKAN AYDIN S., POLAT O., ÖZGEN A.  
International Research Journal of Multidisciplinary Technovation, vol.3, no.4, pp.93-105, 2021 (Peer-Reviewed Journal)
- V. **Enhancing the antibacterial activity of the biosynthesized silver nanoparticles by "püse"**  
ÖZGEN A., GÜRKAN AYDIN S., BİLGİÇ E.  
Istanbul Journal of Pharmacy, vol.50, no.3, pp.245-250, 2020 (ESCI)
- VI. **Calculated Optimized Structure and Geometric Analysis of Oxygenated Fuel Additives: Alcohols and Ethers**  
GÜRKAN AYDIN S., POLAT O., ÖZGEN A., TURALI E.  
ENGINEERING TECHNOLOGY & APPLIED SCIENCE RESEARCH, vol.10, no.3, pp.5632-5636, 2020 (ESCI)
- VII. **Characterization of biosynthesized silver nanoparticles using Hypericum perforatum leaf and determination of their antibacterial activity**  
ÖZGEN A., BİLGİÇ E., GÜRKAN AYDIN S., NİZAMLIOĞLU M.  
Medicine Science, vol.8, no.3, pp.503-507, 2019 (Peer-Reviewed Journal)
- VIII. **Characterization of biosynthesized silver nanoparticles using Hypericum perforatum leaf and determination of their antibacterial activity**  
Özgen A., Bilgiç E., Gürkan Aydın S., Nizamlioğlu M.  
Medicine Science, vol.8, no.3, pp.503-507, 2019 (Peer-Reviewed Journal)
- IX. **Green synthesized silver nanoparticles: Morphology and antibacterial contact effects**  
BİLGİÇ E., GÜRKAN AYDIN S., ÖZGEN A., NİZAMLIOĞLU M.

Medicine Science, vol.8, no.3, pp.541-544, 2019 (Peer-Reviewed Journal)

- X. **Calculated Optimised Structure and Hyperfine Coupling Constant of Some Radical Adducts of 2-Methyl-2-Nitrosopropane**  
GÜRKAN AYDIN S.  
International Journal of Advances in Scientific Research and Engineering, vol.4, no.8, pp.171-177, 2018 (Peer-Reviewed Journal)
- XI. **Calculated Hyperfine Coupling Constants And Geometric Parameters For 3,3,5,5-Tetramethylpyrroline-N-Oxide Radical Products With EPR Spin Trapping**  
GÜRKAN AYDIN S.  
RA Journal of Applied Research, vol.4, no.1, pp.1377-1384, 2018 (Peer-Reviewed Journal)
- XII. **Benzen ve Su Çözeltilerinde  $\dot{I}\pm$ -Fenil-N-Tert-Bütıl Nitrone'xxnin Bazı Radikal Ürünlerinin Teorik Optimize Yapıları ve İnce Yapı Çiftlenim Sabitleri**  
GÜRKAN AYDIN S., UCUN F.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.10, no.1, pp.54-61, 2015 (Peer-Reviewed Journal)

### Refereed Congress / Symposium Publications in Proceedings

- I. **"Theoretical geometric analysis of aircraft construction material PMR 15 Polyimide**  
GÜRKAN AYDIN S.  
TFD 38Türk Fizik Derneği 38. Uluslararası Fizik Kongresi, Turkey, 01 September 2022
- II. **"Geometric Analysis of The Polyphenol Antioxidant Kaemphenol" ,**  
GÜRKAN AYDIN S.  
TFD 37 Türk Fizik Derneği 37. Uluslararası Fizik Kongresi, Muğla, Turkey, 05 September 2021
- III. **Computational study vibrational analysis of nitrosodurene"**  
GÜRKAN AYDIN S.  
TFD 36, 1 - 05 September 2020
- IV. **Structure Optimization and Hyperfine Coupling Constant of Some Radical Adducts of 2,3,5,6-Tetramethylnitrosobenzene**  
GÜRKAN AYDIN S.  
TÜRK FİZİK DERNEĞİ ULUSLARARASI FİZİK KONGRESİ, 4 - 08 September 2019
- V. **Hypericum perforatum YAPRAKLARI KULLANILARAK BİYOSENTEZİ GERÇEKLEŞTİRİLEN GÜMÜŞNANOPARTİKÜLLERİNİN KARAKTERİZASYONU VE ANTİBAKTERİYEL AKTİVİTELERİNİN BELİRLENMESİ**  
ÖZGEN A., BİLGİÇ E., GÜRKAN AYDIN S., NİZAMLIOĞLU M.  
ZEUGMA II. ULUSLARARASI MULTİ DİSİPLİNER ÇALIŞMALARKONGRESİ, Gaziantep, Turkey, 18 - 20 January 2019
- VI. **FİGUS CARİCA KULLANILARAK YEŞİL SENTEZİ GERÇEKLEŞTİRİLMİŞ GÜMÜŞ NANOPARTİKÜLLERİNİN KARAKTERİZASYONU VE ANTİBAKTERİYEL ETKİSİ**  
GÜRKAN AYDIN S., ÖZGEN A., BİLGİÇ E., NİZAMLIOĞLU M.  
ZEUGMA II. ULUSLARARASI MULTİ DİSİPLİNER ÇALIŞMALAR KONGRESİ, Gaziantep, Turkey, 18 - 20 January 2019
- VII. **Calculated Hyperfine Coupling Constants and Geometric Parameters for M4PO Radical Products with EPR Spin Trapping**  
GÜRKAN AYDIN S.  
Türk Fizik Derneği 34. Uluslararası Fizik Kongresi, 5 - 09 September 2018
- VIII. **Calculated optimised structure and hyperfine coupling constant of some radical adducts of 2-methyl-2-nitrosopropane in some solutions**  
GÜRKAN AYDIN S.  
Türk Fizik Derneği 33. Uluslararası Fizik kongresi, 6 - 10 September 2017
- IX. **Calculated optimized structures and hyperfine coupling constants of some radical adducts of  $\alpha$  - phenyl-N-ter-buthyl nitrone in benzene and water solutions**

GÜRKAN AYDIN S., UCUN F.

ICCESEN, 25 - 26 October 2014

- X. **Calculated optimised structures and hyperfine coupling constants of some radical adducts of  $\alpha$  - phenyl-N-ter-buthyl nitron in benzene solution.**

GÜRKAN AYDIN S., UCUN F.

Türk Fizik Derneği 31. Uluslararası Fizik Kongresi, 21 July 2017 - 24 July 2014

- XI. **Electrical characterization of p-type silicon based on conducting polymer**

GÜRKAN AYDIN S., ÖZDEMİR A. F., ALDEMİR D. A., ŞEN GÜR SOY S.

Türk Fizik Derneği 26. Uluslararası Fizik kongresi, 24 - 27 August 2009