

# NİLGÜN ŞEN

## DOÇ. DR.

Diğer E-posta : nilgunsen2001@gmail.com

Uluslararası Araştırmacı ID'leri

ScholarID: M-6570-2018

ORCID: 0000-0002-1997-1312

ScopusID: 56347843100

Yoksis Araştırmacı ID: 235392

### Akademik Unvanlar / Görevler

Doç. Dr.

2022 - 2023

Cranfield University, Defence Chemistry

Dr. Öğr. Üyesi

2017 - 2018

University of Edinburgh, Chemistry

Diğer

2003 - 2014

Kriminal Daire Başkanlığı, Kimyasal İncelemeler Bölümü

### SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- Investigation of groundwater quality in the Southern Coast of the Black Sea: application of computational health risk assessment in Giresun, Türkiye**  
Yazman M. M., Yüksel B., Ustaoglu F., ŞEN N., Tepe Y., TOKATLI C.  
Environmental Science and Pollution Research, cilt.31, sa.39, ss.52306-52325, 2024 (SCI-Expanded)
- Synthesis, structure characterization, Hirshfeld surface analysis, and computational studies of 3-nitro-1,2,4-triazol-5-one (NTO):acridine**  
Şen N.  
Structural Chemistry, cilt.11, sa.12, ss.1-15, 2024 (SCI-Expanded)
- Characterization and properties of a new insensitive explosive co-crystal composed of trinitrotoluene and pyrene**  
Şen N., ASLAN N., Yüksel B., Teciman I.  
Structural Chemistry, cilt.35, sa.2, ss.553-567, 2024 (SCI-Expanded)
- Development of a chitosan-gold nanocomposite based disposable pencil graphite electrode for the selective detection of thiram in peach juice**  
ASLAN N., ŞEN N., Akan M.  
International Journal of Environmental Analytical Chemistry, 2024 (SCI-Expanded)
- New explosive materials through covalent and non-covalent synthesis: Investigation of explosive properties of trinitrotoluene: Acridine and picric acid: Acridine**  
Şen N., Pons J., KURTAY G., Yüksel B., NAZIR H., Khumsri A., ATAKOL O.  
Journal of Molecular Structure, cilt.1292, 2023 (SCI-Expanded)
- Electrochemical determination of insensitive munition constituents 3-nitro-1,2,4-triazol-5-one (NTO) using gold nanoparticle/carbon nanotube-modified pencil graphite electrode in groundwater sample**  
ASLAN N., Şen N., Teciman I., Ali Güngör M.  
Propellants, Explosives, Pyrotechnics, cilt.48, sa.11, 2023 (SCI-Expanded)

7. **Computational insights into bis-N,N-dimethylaniline based D- $\pi$ -A photosensitizers bearing divergent-type of  $\pi$ -linkers for DSSCs**  
NALÇAKAN H., KURTAY G., Sarıkavak K., Şen N., SEVİN DÜZ F.  
Journal of Molecular Graphics and Modelling, cilt.122, 2023 (SCI-Expanded)
8. **Elemental profiling of toxic and modern primers using ICP-MS, SEM-EDS, and XPS: an application in firearm discharge residue investigation**  
Yüksel B., Şen N., Ögünç G. I., ERDOĞAN A.  
Australian Journal of Forensic Sciences, cilt.55, sa.4, ss.529-546, 2023 (SCI-Expanded)
9. **Improved stability of picric acid: 1-aminopyrene' charge-transfer complex: Synthesis, characterization, energetic performance and molecular docking study with B-DNA**  
KURTAY G., Şen N.  
Journal of Molecular Structure, cilt.1262, 2022 (SCI-Expanded)
10. **Crystal engineering with energetic picric acid halogen-based salts: Promising properties of a new family of insensitive materials**  
Şen N.  
Journal of Molecular Structure, cilt.1254, 2022 (SCI-Expanded)
11. **A NOVEL SCHIFF BASES/MULTIWALLED CARBON NANOTUBE BASED ADSORBENTS TO REMOVE 210 Pb FROM WATER**  
ASLAN N., ATAKOL O., Şen N.  
Studia Universitatis Babeş-Bolyai Chemia, cilt.67, sa.1, ss.107-124, 2022 (SCI-Expanded)
12. **Synthesis, characterisation and energetic performance of insensitive energetic salts formed between picric acid and 2,3-diaminotoluene, 2,4-diaminotoluene**  
Sen N., NAZIR H., Atceken N., Hope K. S., ACAR N., ATAKOL O.  
Journal of Molecular Structure, cilt.1205, 2020 (SCI-Expanded)
13. **High-Pressure Study of Two Polymorphs of 2,4,6-Trinitrotoluene Using Neutron Powder Diffraction and Density Functional Theory Methods**  
Konar S., Michalchuk A. A. L., Sen N., Bull C. L., Morrison C. A., Pulham C. R.  
Journal of Physical Chemistry C, cilt.123, sa.43, ss.26095-26105, 2019 (SCI-Expanded)
14. **Characterization and properties of a new energetic co-crystal composed of trinitrotoluene and 2,6-diaminotoluene**  
Sen N.  
Journal of Molecular Structure, cilt.1179, ss.453-461, 2019 (SCI-Expanded)
15. **A new cocrystal explosive trinitrotoluene (TNT):1-amino-4-bromonaphthalene with reduced sensitivity**  
Sen N.  
Turkish Journal of Chemistry, cilt.42, sa.5, ss.1321-1333, 2018 (SCI-Expanded)
16. **A 1:1 ENERGETIC CO-CRYSTAL FORMED BETWEEN TRINITROTOLUENE AND 2,3-DIAMINOTOLUENE**  
Sen N.  
MACEDONIAN JOURNAL OF CHEMISTRY AND CHEMICAL ENGINEERING, cilt.37, sa.1, ss.61-69, 2018 (SCI-Expanded)
17. **GFAAS Determination of Antimony, Barium, and Lead Levels in Gunshot Residue Swabs: An Application in Forensic Chemistry**  
Yuksel B., Ozler-Yigiter A., Bora T., Sen N., KAYAALTI Z.  
ATOMIC SPECTROSCOPY, cilt.37, sa.4, ss.164-169, 2016 (SCI-Expanded)
18. **A new method to reduce false positives due to antimony in detection of gunshot residues**  
Aksoy Ç., Bora T., Şenocak N., Aydın F.  
Forensic Science International, cilt.250, ss.87-90, 2015 (SCI-Expanded)
19. **Determination of metals contamination in illicit ecstasy drug samples using ICP-OES and XRF**  
Bora T., Aydın H., Atac Y., ŞEN N., Aksoy C.  
Atomic Spectroscopy, cilt.35, sa.4, ss.139-146, 2014 (SCI-Expanded)
20. **Thermal Decomposition of Dinitro-chloro-azido Benzenes: A Comparison of Theoretical and**

## Experimental Results

Şen N., Özkaramete E., Yilmaz N., Öz S., Svoboda I., Akay M. A., Atakol O.

Journal of Energetic Materials, cilt.32, sa.1, ss.1-15, 2014 (SCI-Expanded)

### 21. **Experimental and computational studies on the thermal degradation of nitroazidobenzenes**

Özkaramete E., Şenocak N., Inal K. E., Öz S., Svoboda I., Atakol O.

Propellants, Explosives, Pyrotechnics, cilt.38, sa.1, ss.113-119, 2013 (SCI-Expanded)

## Diğer Dergilerde Yayınlanan Makaleler

### 1. **SÜPERSONİK ve SUBSONİK MÜHİMMATIN ATIŞ ARTIKLARININ DAĞILIMI ÜZERİNDEKİ ETKİLERİ**

ÖĞÜNÇ G. İ., ŞEN N., YÜKSEL B., OĞUR E., İŞCAN H.

Güvenlik Bilimleri Dergisi, cilt.13, sa.1, ss.27-62, 2024 (Hakemli Dergi)

### 2. **LC-MS/MS Investigation of nitrosamine impurities in certain Sartan group medicinal products available in Istanbul, Türkiye Investigation des impuretés des nitrosamines par LC-MS/MS dans certains médicaments du groupe Sartan disponibles à Istanbul, Turquie**

Öncü T., Yüksel B., Binay E., Şen N.

Annales Pharmaceutiques Francaises, cilt.82, sa.1, ss.72-83, 2024 (ESCI)

### 3. **Analysis of Copper(II) Ions in Human Blood Using a New Solid-Contact PVC Membrane Potentiometric Sensor Based on a N,N'-Bis(salicylidene)-1,3-diaminopropane Schiff Base**

ASLAN N., Koçak Z., KORMALI ERTÜRÜN H. E., Şen N.

Analytical and Bioanalytical Chemistry Research, cilt.10, sa.2, ss.193-204, 2023 (ESCI)

### 4. **Assessing caffeine levels in soft beverages available in Istanbul, Turkey: An LC-MS/MS application in food toxicology**

Yüksel B., Öncü T., Şen N.

Toxicologie Analytique et Clinique, cilt.35, sa.1, ss.33-43, 2023 (ESCI)

### 5. **Yeni Nesil Enerjik 1(3-klorofenil)-1H-tetrazol'ün Sentezi, Karakterizasyonu, Termokinetik Analizi ve Enerjik Performans Özellikleri**

SEN N., Bozkuş S. İ., Yüksel B., Gürpınar K., GÜRSOY TUNCER Y., Sahin E., ATAKOL O.

Süleyman Demirel Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi, cilt.16, sa.2, ss.468-489, 2021 (Hakemli Dergi)

### 6. **Effect of exposure time and smoking habit on arsenic levels in biological samples of metal workers in comparison with controls**

YÜKSEL B., Sen N., TÜRKSOY V. A., TUTKUN E., SÖYLEMEZOĞLU T.

MARMARA PHARMACEUTICAL JOURNAL, cilt.22, sa.2, ss.218-226, 2018 (ESCI)

### 7. **Development and validation of a GC-FID method for determination of cocaine in illicit drug samples**

Yuksel B., Sen N.

JOURNAL OF RESEARCH IN PHARMACY, cilt.22, sa.4, ss.511-518, 2018 (ESCI)

## Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

### 1. **TNT Polymorphs under Hydrostatic Compression: A Combined Neutron Diffraction and Density Functional Theory Investigation**

ŞEN N., Konar S., Michaluck A. A., Bull C. L., Marrison C. A., Pulham C. R.

57th European High Pressure Research Group Meeting on High Pressure Science and Technology, Prague, 1 - 06 Eylül 2019

### 2. **Crystal Engineering of Energetic Materials: Co-crystals of 2,4,6-trinitrophenol with Modified Performance and Improved Sensitivity**

ŞEN N., Pulham C. R.

22nd International Seminar New Trends in Research of Energetic Materials, Prag, Çek Cumhuriyeti, 10 - 12 Nisan 2019

3. **Characterization and properties of a novel energetic-non energetic co-crystal explosive composed of TNT and 2,2-bipyridine**  
ŞEN N.  
FIRST INTERNATIONAL BALKAN CHEMISTRY CONGRESS 1BCC2018, Edirne, Türkiye, 17 - 20 Eylül 2018, ss.1-248
4. **Crystal Engineering of Energetic Materials: Co-crystals of Trinitro toluene(TNT) with Modified Performance and Improved Chemical Stability**  
ŞEN N.  
INTERNATIONAL CONFERENCE ON INNOVATIVE ENGINEERING APPLICATIONS SCIEA 2018, Sivas, Türkiye, 20 - 22 Eylül 2018, ss.1-58
5. **Co-crystallisation of energetic materials with reduced sensitivity**  
ŞEN N., PULHAM C. R.  
31st European Crystallographic Meeting, Oviedo, İspanya, 22 - 27 Ağustos 2018, ss.1-421
6. **Theoretical Studies On The Thermodynamic Properties and Detonation Properties Of Cyclotrimethylenetrinitramine (RDX) With Aluminum And Boron Metals**  
ŞEN N., YÜKSEL B.  
28. ULUSAL KİMYA KONGRESİ, Mersin, Türkiye, 15 - 21 Ağustos 2016, ss.1-345
7. **Crystal Engineering of Energetic Materials: Novel co-crystal Explosives with Good Sensitivity**  
ŞEN N.  
International Conference on Physical Chemistry and Functional Materials(PCFM'18), Elazığ, Türkiye, 19 - 21 Haziran 2018, cilt.127, ss.1-230
8. **Cocrystallization of Energetic Materials with Enhanced Sensitivity**  
ŞEN N., Pulham C. R.  
8th Black Sea Basin Conference on Analytical Chemistry BBCAC, İstanbul, Türkiye, 9 - 11 Mayıs 2018, ss.1-255
9. **Cocrystalization of Trinitrotoluene(TNT) with Enhanced Safety**  
ŞEN N., KENNEDY S. R., Pulham C. R.  
The 6th International Symposium on Energetic Materials and their Applications ISEM 2017, Sendai, Japonya, 6 - 10 Kasım 2017, ss.1-359
10. **Determination of False Positives in GSR Examinations**  
ŞEN N., BORA T., AKSOY C., AYDIN F.  
International Scientific Conference "Archibald Reiss Days" Thematic Conference Proceedings Of International Significance, Belgrade, Sırbistan, 3 - 04 Mart 2015, ss.1-468
11. **Toxicology of Synthetic Cannabinoids and Their Analysis in Herbal Materials**  
YÜKSEL B., EROĞLU A., KAYAALTI Z., ŞEN N., BORA T.  
1st International Congress Workshop of Forensic Toxicology, Ankara, Türkiye, 29 - 30 Kasım 2014, ss.1-185
12. **Medical Usage of Arsenic Trioxide**  
YÜKSEL B., Eroglu A., ŞEN N.  
1st INTERNATIONAL CONGRESS WORKSHOP of FORENSIC TOXICOLOGY, Ankara, Türkiye, 29 - 30 Kasım 2014, ss.1-185
13. **Review of The Perspectives on Synthetic Cannabinoids, Receptors and Acute Effects**  
PARLAKGÖRÜR M., ŞEN N., BORA T., YÜKSEL B., AKSOY Ç.  
1st International Congress Workshop of Forensic Toxicology, Ankara, Türkiye, 29 - 30 Kasım 2014, ss.1-185
14. **The Investigation of Thermal Decomposition of Nitro-Choloro-Azidobenzenes with Thermoanalytical and Computational Methods**  
ŞEN N., YILMAZ N., ÖZ S., Svaboda I., ATAKOL O.  
4th EuCheMs Chemistry Congress, Prag, 26 - 30 Ağustos 2012, ss.1-136

## Metrikler

Yayın: 48

Atıf (WoS): 23

Atıf (Scopus): 301

H-İndeks (WoS): 3

H-İndeks (Scopus): 12

## Araştırma Alanları

Mühendislik ve Teknoloji