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Academic Positions

Associate Professor
2022 - 2023

Cranfield University, Defence Chemistry

Assistant Professor
2017 - 2018

University of Edinburgh, Chemistry

Other
2003 - 2014

Kimyasal İncelemeler Bölümü

Journal articles indexed in SCI, SSCI, and AHCI

- Profiling of organic and inorganic impurities in seized methamphetamine samples from Ankara, Türkiye: A chemometric implication in forensic chemistry**
Aksoy Ç., Yüksel B., ŞEN N., Ustaoglu F., Söylemez G., Öncü T.
Forensic Science International, vol.368, 2025 (SCI-Expanded)
- 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, vol.31, no.39, pp.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, vol.11, no.12, pp.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, vol.35, no.2, pp.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, vol.1292, 2023 (SCI-Expanded)

7. **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 İ., Ali Güngör M.
Propellants, Explosives, Pyrotechnics, vol.48, no.11, 2023 (SCI-Expanded)
8. **Computational insights into bis-N,N-dimethylaniline based D- π -A photosensitizers bearing divergent-type of π -linkers for DSSCs**
NALÇAKAN H., KURTAY G., Sarıkavak K., Şen N., SEVİN DÜZ F.
Journal of Molecular Graphics and Modelling, vol.122, 2023 (SCI-Expanded)
9. **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, vol.55, no.4, pp.529-546, 2023 (SCI-Expanded)
10. **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, vol.1262, 2022 (SCI-Expanded)
11. **Crystal engineering with energetic picric acid halogen-based salts: Promising properties of a new family of insensitive materials**
Şen N.
Journal of Molecular Structure, vol.1254, 2022 (SCI-Expanded)
12. **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, vol.67, no.1, pp.107-124, 2022 (SCI-Expanded)
13. **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, vol.1205, 2020 (SCI-Expanded)
14. **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, vol.123, no.43, pp.26095-26105, 2019 (SCI-Expanded)
15. **Characterization and properties of a new energetic co-crystal composed of trinitrotoluene and 2,6-diaminotoluene**
Sen N.
Journal of Molecular Structure, vol.1179, pp.453-461, 2019 (SCI-Expanded)
16. **A new cocrystal explosive trinitrotoluene (TNT):1-amino-4-bromonaphthalene with reduced sensitivity**
Sen N.
Turkish Journal of Chemistry, vol.42, no.5, pp.1321-1333, 2018 (SCI-Expanded)
17. **A 1:1 ENERGETIC CO-CRYSTAL FORMED BETWEEN TRINITROTOLUENE AND 2,3-DIAMINOTOLUENE**
Sen N.
MACEDONIAN JOURNAL OF CHEMISTRY AND CHEMICAL ENGINEERING, vol.37, no.1, pp.61-69, 2018 (SCI-Expanded)
18. **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, vol.37, no.4, pp.164-169, 2016 (SCI-Expanded)
19. **A new method to reduce false positives due to antimony in detection of gunshot residues**
Aksoy Ç., Bora T., Şenocak N., Aydin F.
Forensic Science International, vol.250, pp.87-90, 2015 (SCI-Expanded)

20. **Determination of metals contamination in illicit ecstasy drug samples using ICP-OES and XRF**
Bora T., Aydin H., Atac Y., ŞEN N., Aksoy C.
Atomic Spectroscopy, vol.35, no.4, pp.139-146, 2014 (SCI-Expanded)
21. **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, vol.32, no.1, pp.1-15, 2014 (SCI-Expanded)
22. **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, vol.38, no.1, pp.113-119, 2013 (SCI-Expanded)

Articles Published in Other Journals

1. **IMPACTS of SUPERSONIC and SUBSONIC AMMUNITION on GUNSHOT RESIDUE DISTRIBUTION**
ÖĞÜNÇ G. İ., ŞEN N., YÜKSEL B., OĞUR E., İŞCAN H.
Güvenlik Bilimleri Dergisi, vol.13, no.1, pp.27-62, 2024 (Peer-Reviewed Journal)
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, vol.82, no.1, pp.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, vol.10, no.2, pp.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, vol.35, no.1, pp.33-43, 2023 (ESCI)
5. **Synthesis, Characterization, Thermokinetic Analysis and Energetic Performance Properties of New Generation Energetic 1 (3-chlorophenyl) -1H- tetrazole**
ŞEN N., Bozkuş S. İ., Yüksel B., Gürpınar K., GÜRİSOY TUNCER Y., Sahin E., ATAKOL O.
Süleyman Demirel Üniversitesi Fen Edebiyat Fakültesi Fen Dergisi, vol.16, no.2, pp.468-489, 2021 (Peer-Reviewed Journal)
6. **Effect of exposure time and smoking habit on arsenic levels in biological samples of metal workers in comparison with controls**
YÜKSEL B., Şen N., TÜRKSOY V. A., TUTKUN E., SÖYLEMEZOĞLU T.
MARMARA PHARMACEUTICAL JOURNAL, vol.22, no.2, pp.218-226, 2018 (ESCI)
7. **Development and validation of a GC-FID method for determination of cocaine in illicit drug samples**
Yüksel B., Şen N.
JOURNAL OF RESEARCH IN PHARMACY, vol.22, no.4, pp.511-518, 2018 (ESCI)

Papers Presented at Peer-Reviewed Scientific Conferences

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 September 2019, (Summary Text)

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, Czech Republic, 10 - 12 April 2019, (Full Text)
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, Turkey, 17 - 20 September 2018, pp.1-248, (Summary Text)
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, Turkey, 20 - 22 September 2018, pp.1-58, (Summary Text)
5. **Co-crystallisation of energetic materials with reduced sensitivity**
ŞEN N., PULHAM C. R.
31st European Crystallographic Meeting, Oviedo, Spain, 22 - 27 August 2018, pp.1-421, (Summary Text)
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, Turkey, 15 - 21 August 2016, pp.1-345, (Summary Text)
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, Turkey, 19 - 21 June 2018, vol.127, pp.1-230, (Summary Text)
8. **Cocrystallization of Energetic Materials with Enhanced Sensitivity**
ŞEN N., Pulham C. R.
8th Black Sea Basin Conference on Analytical Chemistry BBCAC, İstanbul, Turkey, 9 - 11 May 2018, pp.1-255, (Summary Text)
9. **Cocrystallization 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, Japan, 6 - 10 November 2017, pp.1-359, (Summary Text)
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, Serbia, 3 - 04 March 2015, pp.1-468, (Full Text)
11. **Medical Usage of Arsenic Trioxide**
YÜKSEL B., Eroglu A., ŞEN N.
1st INTERNATIONAL CONGRESS WORKSHOP of FORENSIC TOXICOLOGY, Ankara, Turkey, 29 - 30 November 2014, pp.1-185, (Summary Text)
12. **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, Turkey, 29 - 30 November 2014, pp.1-185, (Summary Text)
13. **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, Turkey, 29 - 30 November 2014, pp.1-185, (Summary Text)
14. **The Investigation of Thermal Decomposition of Nitro-Chloro-Azidobenzenes with Thermoanalytical**

and Computational Methods

ŞEN N., YILMAZ N., ÖZ S., Svaboda I., ATAKOL O.

4th EuCheMsChemistry Congress, Prag, 26 - 30 August 2012, pp.1-136, (Summary Text)

Metrics

Publication: 49

Citation (WoS): 23

Citation (Scopus): 401

H-Index (WoS): 3

H-Index (Scopus): 12

Research Areas

Engineering and Technology