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Publons / Web Of Science ResearcherID: HWQ-4347-2023

ScopusID: 56809447000

Education Information

Doctorate, Ankara University, Fen Fakültesi, Kimya Bölümü, Turkey 2009 - 2017

Research Areas

Chemistry, Analytical Chemistry, Electromagnetic Methods, Food Analysis, Chemometry, Sensors, Natural Sciences

Academic Titles / Tasks

Associate Professor, Ankara University, Fen Fakültesi, Kimya Bölümü, 2021 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Gold nanoparticles decorated kaolinite mineral modified screen-printed electrode: Use for simple, sensitive determination of gallic acid in food samples**
Saribaş P., Yıldız C., ESKİKÖY BAYRAKTEPE D., Pekin Turan M., YAZAN Z.
Food Chemistry, vol.453, 2024 (SCI-Expanded)
- II. **Electrochemical detection of bicalutamide in sepiolite clay sensing platform: Its possible electrooxidation mechanism, determination, and DNA interaction**
ESKİKÖY BAYRAKTEPE D., POLAT K., Yıldız C., YAZAN Z.
ELECTROANALYSIS, vol.36, no.7, 2024 (SCI-Expanded)
- III. **A new screen-printed carbon sensor decorated gold nanoparticles/kaolinite mineral: electrochemical analysis of propyphenazone and the investigation of ds-DNA interaction**
Yıldız C., ESKİKÖY BAYRAKTEPE D., YAZAN Z.
MONATSCHEFTE FÜR CHEMIE, vol.155, no.1, pp.47-55, 2024 (SCI-Expanded)
- IV. **Voltammetric studies on the interaction of ds-DNA with anti-cancer agents imatinib and erlotinib - Comparison of Au and Pt nanoparticle effects to drug-DNA complex formation**
Eskiköy Bayraktepe D., Yıldız C., Yazan Z.
JOURNAL OF MOLECULAR LIQUIDS, vol.388, 2023 (SCI-Expanded)
- V. **Electrochemical sensor for simultaneous determination of paracetamol, propyphenazone, and**

caffeine-Electrodes based on poly(L-cystine)/gold nanoparticles plating on pencil graphite

Urcuk A., Yıldız C., Eskiköy Bayraktepe D., Yazan Z.

MICROCHEMICAL JOURNAL, vol.193, 2023 (SCI-Expanded)

- VI. **The development of electrochemical DNA biosensor based on poly-L-methionine and bimetallic AuPt nanoparticles coating: Picomolar detection of Imatinib and Erlotinib**
Eskiköy Bayraktepe D., Yıldız C., Yazan Z.
TALANTA, vol.257, 2023 (SCI-Expanded)
- VII. **Electrochemical fabrication of poly(L-alanine)-gold nanoparticle nanocomposite-modified electrode: application for determination and mechanism of antipsychotic drug olanzapine**
Tuezuen U. N., Yıldız C., ESKİKÖY BAYRAKTEPE D., POLAT K., YAZAN Z.
MONATSHEFTE FÜR CHEMIE, vol.154, pp.95-104, 2023 (SCI-Expanded)
- VIII. **Preparation of Multiwalled Carbon Nanotubes: Electrochemically Treated Pencil Graphite Electrodes for Nanomolar Detection of L-Tryptophan in Complex Samples**
Yıldız C., ESKİKÖY BAYRAKTEPE D., YAZAN Z.
CHEMISTRYSELECT, vol.7, no.40, 2022 (SCI-Expanded)
- IX. **Highly sensitive and disposable electrochemical nano sensor for simultaneous analysis of caffeic acid and uric acid based on halloysite nanotubes and magnetite nanoparticles**
Urcuk A., Yıldız C., ESKİKÖY BAYRAKTEPE D., YAZAN Z.
MICROCHEMICAL JOURNAL, vol.181, 2022 (SCI-Expanded)
- X. **Square wave voltammetric pKa determination of aspirin using multi-way data analysis models**
YAZAN Z., ESKİKÖY BAYRAKTEPE D., DİNÇ E.
CHEMICAL PAPERS, vol.76, no.9, pp.5389-5397, 2022 (SCI-Expanded)
- XI. **Kinetic and thermodynamic studies on the interaction between calf thymus DNA and food additive vanillin - electrochemical methods**
Urcuk A., Bayraktepe D., Yıldız C., Yazan Z.
JOURNAL OF MOLECULAR LIQUIDS, vol.360, 2022 (SCI-Expanded)
- XII. **Bismuth nanoparticles decorated on Na-montmorillonite-multiwall carbon nanotube for simultaneous determination of heavy metal ions- electrochemical methods**
Yıldız C., ESKİKÖY BAYRAKTEPE D., YAZAN Z., ÖNAL M.
JOURNAL OF ELECTROANALYTICAL CHEMISTRY, vol.910, 2022 (SCI-Expanded)
- XIII. **Two-layered Au@Ag Bimetallic Nanocomposites-poly (L-Met) Platform for Highly Sensitive Chlorpheniramine Maleate Detection**
Bayraktepe D., YAZAN Z.
Electroanalysis, vol.34, no.3, pp.445-454, 2022 (SCI-Expanded)
- XIV. **Highly sensitive direct simultaneous determination of zinc(II), cadmium(II), lead(II), and copper(II) based on in-situ-bismuth and mercury thin-film plated screen-printed carbon electrode**
Yıldız C., Bayraktepe D., YAZAN Z.
Monatshefte für Chemie, vol.152, no.12, pp.1527-1537, 2021 (SCI-Expanded)
- XV. **Preparation and characterization of a pencil graphite electrode modified with gold nanoparticles decorated poly (L-methionine) and its use in the simultaneous sensitive electrochemical analysis of ascorbic acid, acetaminophen, chlorpheniramine maleate, and caffeine**
Bayraktepe D., İNAL E. K., YAZAN Z.
Microchemical Journal, vol.171, 2021 (SCI-Expanded)
- XVI. **Investigation of electrochemical oxidation mechanism, rapid and low-level determination for whitening cosmetic: arbutin in aqueous solution by nano sepiolite clay**
Aydar Barutcu S., Eskikoy Bayraktepe D., YAZAN Z., POLAT K., Filik H.
Chemical Papers, vol.75, no.7, pp.3483-3491, 2021 (SCI-Expanded)
- XVII. **A voltammetric study on drug-DNA interactions: Kinetic and thermodynamic aspects of the relations between the anticancer agent dasatinib and ds-DNA using a pencil lead graphite electrode**
Bayraktepe D.
Microchemical Journal, vol.157, 2020 (SCI-Expanded)

- XVIII. **Four-way parallel factor analysis of voltammetric four-way dataset for monitoring the etoposide-DNA interaction with its binding constant determination**
YAZAN Z., Bayraktepe D., DİNÇ E.
Bioelectrochemistry, vol.134, 2020 (SCI-Expanded)
- XIX. **Application of Single-use Electrode Based on Nano-clay and MWCNT for Simultaneous Determination of Acetaminophen, Ascorbic Acid and Acetylsalicylic Acid in Pharmaceutical Dosage**
Bayraktepe D., YAZAN Z.
Electroanalysis, vol.32, no.6, pp.1263-1272, 2020 (SCI-Expanded)
- XX. **Electrochemical low-level detection of l-tryptophan in human urine samples: use of pencil graphite leads as electrodes for a fast and cost-effective voltammetric method**
Yildiz C., Bayraktepe D., YAZAN Z.
Monatshefte für Chemie, vol.151, no.6, pp.871-879, 2020 (SCI-Expanded)
- XXI. **Low-level electrochemical analysis of ketoconazole by sepiolite nanoparticles modified sensor in shampoo sample**
Aydar S., Bayraktepe D., Filik H., YAZAN Z.
Acta Chimica Slovenica, vol.67, no.3, pp.729-738, 2020 (SCI-Expanded)
- XXII. **Sensitive and cost effective disposable composite electrode based on graphite, nano-smectite and multiwall carbon nanotubes for the simultaneous trace level detection of ascorbic acid and acetylsalicylic acid in pharmaceuticals**
Bayraktepe D., YAZAN Z., ÖNAL M.
Talanta, vol.203, pp.131-139, 2019 (SCI-Expanded)
- XXIII. **Electro-oxidation mechanism of meloxicam and electrochemical sensing platform based on graphene nanoparticles for its sensing pharmaceutical sample**
Eroglu M. E., Bayraktepe D., POLAT K., YAZAN Z.
Current Pharmaceutical Analysis, vol.15, no.4, pp.346-354, 2019 (SCI-Expanded)
- XXIV. **A nano-sepiolite clay electrochemical sensor for the rapid electro-catalytic detection of hydroquinone in cosmetic products**
Aydar S., Bayraktepe D., Filik H., YAZAN Z.
Acta Chimica Slovenica, vol.65, no.4, pp.946-954, 2018 (SCI-Expanded)
- XXV. **Electrochemical sensor based on a sepiolite clay nanoparticle-based electrochemical sensor for ascorbic acid detection in real-life samples**
Pekin M., Bayraktepe D., YAZAN Z.
Ionics, vol.23, no.12, pp.3487-3495, 2017 (SCI-Expanded)
- XXVI. **Syntheses, characterization of and studies on the electrochemical behaviour of ferrocenyl dithiophosphonates and 4-methoxyphenyl dithiophosphonates**
SAĞLAM E. G., Erden S., Tutsak O., Bayraktepe D., Durmus Z., DAL H., Ebinc A.
Phosphorus, Sulfur and Silicon and the Related Elements, vol.192, no.3, pp.322-329, 2017 (SCI-Expanded)
- XXVII. **Sensitive and selective voltammetric determination of anti-cancer agent shikonin on sepiolite clay/TiO₂ nanoparticle/MWCNTs composite carbon paste sensor and investigation of its electro-oxidation mechanism**
Bayraktepe D., YAZAN Z., POLAT K.
Journal of Electroanalytical Chemistry, vol.780, pp.38-45, 2016 (SCI-Expanded)
- XXVIII. **TiO₂ modified carbon paste sensor for voltammetric analysis and chemometric optimization approach of amlodipine in commercial formulation**
Erden S., Bayraktepe D., YAZAN Z., DİNÇ E.
Ionics, vol.22, no.7, pp.1231-1240, 2016 (SCI-Expanded)
- XXIX. **Voltammetric determination of etoposide by using Sepiolite clay modified electrode and its interaction with DNA**
Bayraktepe D., Yanardag T., Yazan Z., Aksut A.
Revue Roumaine de Chimie, vol.60, no.4, pp.287-295, 2015 (SCI-Expanded)
- XXX. **Electrochemical characterization and voltammetric anodic stripping methods for the determination**

of valsartan

Gurler N., Bayraktepe D., Durmus Z., DİNÇ E.

Revista de Chimie, vol.64, no.11, pp.1211-1217, 2013 (SCI-Expanded)

XXXI. **Electrochemical oxidation of atorvastatin and its adsorptive stripping determination in pharmaceutical dosage forms and biological fluids**

Eskiköy D., Durmus Z., Kiliç E.

Collection of Czechoslovak Chemical Communications, vol.76, no.12, pp.1633-1649, 2011 (SCI-Expanded)

Articles Published in Other Journals

- I. **An adsorptive stripping voltammetric study based on disposable pencil graphite sensor for the determination of caffeine in local brand ice tea**
Zereykaya b., Eskiköy Bayraktepe D., YAZAN Z.
Cumhuriyet Science Journal, vol.41, no.3, pp.680-689, 2020 (Peer-Reviewed Journal)
- II. **NiO Modifiye Karbon Pasta Sensör Yüzeyinde Bakır ve Kadmiyum'un Anodik Sıyırma Voltametrisi ile Tayini**
YILDIZ C., ESKİKÖY BAYRAKTEPE D., YAZAN Z.
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.7, no.3, pp.1403-1416, 2019 (Peer-Reviewed Journal)
- III. **NiO Modifiye Karbon Pasta Sensör Yüzeyinde Bakır ve Kadmiyum'un Anodik Sıyırma Voltametrisi ile Bir arada Tayini**
YILDIZ C., Eskiköy Bayraktepe D., YAZAN Z.
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.7, pp.1403-1416, 2019 (Peer-Reviewed Journal)
- IV. **Electrochemical oxidation pathway of the anti-cancer agent dasatinib using disposable pencil graphite electrode and its adsorptive stripping voltammetric determination in biological samples**
Eskiköy Bayraktepe D., POLAT K., YAZAN Z.
Journal of the Turkish Chemical Society, Section A: Chemistry, vol.5, no.2, pp.381-392, 2018 (Scopus)

Refereed Congress / Symposium Publications in Proceedings

- I. **A FOUR-WAY ANALYSIS OF FOUR-DIMENSIONAL VOLTAMMETRIC DATASET FOR MONITORING THE INTERACTION OF ETOPOSIDE AND CALF THYMUS DNA USING PARAFAC MODEL**
ESKİKÖY BAYRAKTEPE D., YAZAN Z., DİNÇ E.
International Conference on New Trends in Chemometrics and Applications, 1 - 04 May 2019
- II. **Three-Way Analysis of Potential-Frequency Dataset for the Determination of the pKa Values of Aspirin by Parallel Factor Analysis Model**
YAZAN Z., ESKİKÖY BAYRAKTEPE D., DİNÇ E.
International Conference on New Trends in Chemometrics and Applications, 1 - 04 May 2019
- III. **A Four-Way Analysis of Four-Dimensional Voltammetric Dataset for Monitoring The Interaction of Etoposide and Calf Thymus DNA Using PARAFAC Model**
Eskiköy Bayraktepe D., YAZAN Z., DİNÇ E.
4th International Conference on New Trends in Chemometrics and Applications, 1 - 04 May 2019
- IV. **An Electrochemical Sensor For Sensitive and Fast Detection of Mitoxantrone Based On Nanosepiolite Electrode**
ESKİKÖY BAYRAKTEPE D., YILDIZ C., YAZAN Z.
12th International Symposium on Pharmaceutical Sciences-ISOPS2018, 26 - 29 June 2018
- V. **Electrochemical Sensor For The Determination of Anti-Cancer Shikonin Based on NSC/TiO₂/MWCNTs Composite**
ESKİKÖY BAYRAKTEPE D., YAZAN Z.
12th International Symposium on Pharmaceutical Sciences-ISOPS2018, 26 - 29 June 2018

- VI. **Simultaneous Determination of Copper and Cadmium at NiO Modified Carbon Paste Sensor by Anodic Stripping Voltammetry**
YILDIZ C., ESKİKÖY BAYRAKTEPE D., YAZAN Z.
International Trace Analysis Congress-ITAC2018, 20 - 23 June 2018
- VII. **A Novel Electrochemical Sensor for Simultaneous Analysis of Ascorbic Acid and Acetyl Salicylic Acid Using BENT/MWCNTs Composite Modified Pencil Graphite Electrode**
ESKİKÖY BAYRAKTEPE D., YAZAN Z.
International Trace Analysis Congress 2018 (ITAC 2018), 20 - 23 June 2018
- VIII. **Adsorptive Stripping Voltammetric Determination of the Anti-Cancer Agent Dasatinib Using Disposable Pencil-Graphite Electrode**
Eskiköy Bayraktepe D., YAZAN Z., POLAT K.
ANCON International congress of chemistry and materials sciences, Ankara, Turkey, 5 - 07 October 2017
- IX. **Adsorptive Stripping Voltammetric Determination of the Anti-Cancer Agent Dastanib Using Disposable Pencil-Graphite Electrode.**
Eskiköy Bayraktepe D., Yazan Z., Polat K.
ANCON 2017, International Congress on Chemistry and Materials Science., Ankara, Turkey, 5 - 10 October 2017
- X. **Voltammetric Mitoxantrone Determination in Biological and Pharmaceutical Samples Using a Carbon Paste Sensor Modified with Sepiolite Clay**
ESKİKÖY BAYRAKTEPE D., YILDIZ C., YAZAN Z.
"International Congress on Chemistry and Materials Science", 5 - 07 October 2017
- XI. **Investigating the interaction of DNA and bicalutamide by using cyclic and differential pulse voltammetric methods**
YAZAN Z., ESKİKÖY BAYRAKTEPE D.
Recent Developments in Pharmaceutical Analysis - RDP A 2017, 20 - 23 September 2017
- XII. **Anti-cancer agent bicalutamide determination on sepiolite modified carbon paste sensor by differential pulse and square wave voltammetry**
YAZAN Z., ESKİKÖY BAYRAKTEPE D.
Recent Developments in Pharmaceutical Analysis - RDP A 2017, 20 - 23 September 2017
- XIII. **Anti-cancer agent shikonin determination on modified carbon paste sensor by adsorptive stripping voltammetry and interaction with ds-DNA**
ESKİKÖY BAYRAKTEPE D., YAZAN Z.
3. Uluslararası İlaç ve Eczacılık Kongresi, 26 - 29 April 2017
- XIV. **Anti-cancer agent shikonin determination on modified carbon paste sensor by adsorptive stripping voltammetry and interaction with ds-DNA**
Yazan Z., Eskiköy Bayraktepe D.
3. İlaç ve Eczacılık kongresi, İstanbul, Turkey, 26 - 29 April 2017, pp.1-3
- XV. **Novel Electrochemical Sensor Based on Sepiolite Clay Modified Carbon Paste Electrode for Ascorbic Acid Detection**
Pekin M., Eskiköy Bayraktepe D., DURMUŞ Z.
10th Aegean Analytical Chemistry Days, 29 September - 02 October 2016
- XVI. **Sensitive and Selective Voltammetric Approach for Determination of Anti Cancer Drug Etoposide Based on Sepiolite clay TiO₂ nanoparticles Modified Carbon Paste Sensor and Investigation of its Interaction with DNA**
Eskiköy Bayraktepe D., DURMUŞ Z.
10th Aegean analytical Chemistry Days, 29 September - 02 October 2016

Supported Projects

Yazan Z., Eskiköy Bayraktepe D., TUBITAK Project, Bazı Antikanser İlaçların Biyouyumlu DNA Biyosensörü ile Tayinleri ve DNA ile Etkileşimlerinin İncelenmesi, 2021 - 2022

Yazan Z., Eskiköy Bayraktepe D., Project Supported by Higher Education Institutions, Bentonit kiline dayanan, sudaki ağır metallerin tayinine yönelik basit, uygulanabilir, ekonomik bir karbon esaslı perde baskılı voltametrik sensör geliştirilmesi, 2020 - 2022

Scientific Refereeing

Project Supported by Higher Education Institutions, BAP Research Project, Karadeniz Technical University, Turkey, November 2022

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