

# Prof. ADİL ELİK

## Personal Information

**Email:** [elik@cumhuriyet.edu.tr](mailto:elik@cumhuriyet.edu.tr)

**Web:** <https://avesis.cumhuriyet.edu.tr/elik>

## International Researcher IDs

ORCID: 0000-0002-3942-4711

Publons / Web Of Science ResearcherID: B-8162-2016

Yoksis Researcher ID: 53992

## Education Information

Doctorate, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, Turkey 1990 - 1995

Postgraduate, Sivas Cumhuriyet University, Fen-Edebiyat Fakültesi, Kimya Pr., Turkey 1987 - 1990

Undergraduate, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, Turkey 1982 - 1986

## Dissertations

Doctorate, Çevresel ağır metal kirliliğinin izlenmesinde yeni bir örnek hazırlama yaklaşımı: Ultrasonik leaching, Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, Kimya Bölümü, 1995

Postgraduate, Bazı doğal sediment ve filizlerin analize hazırlanmasında çözünürleştirme tekniklerinin optimizasyonu, Sivas Cumhuriyet Üniversitesi, Fen-Edebiyat Fakültesi, Kimya Pr., 1990

## Research Areas

Agricultural Sciences, Natural Sciences

## Academic Titles / Tasks

Professor, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2023 - Continues

Associate Professor, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2019 - 2023

Assistant Professor, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 1997 - 2019

Research Assistant, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 1987 - 1997

## Academic and Administrative Experience

University Executive Board Member, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2024 - Continues

Anabilim Dalı Akademik Kurul Üyesi, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2020 - Continues

Head of Department, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2020 - Continues

Member of the Senate, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2019 - Continues

Rektörlüğe Bağlı Birim Başkanı, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2017 - Continues

Sivas Cumhuriyet Üniversitesi, Fen Fakültesi, 2016 - Continues

Fakülte Yönetim Kurulu Üyesi, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2019 - 2022

Rektörlüğe Bağlı Birim Başkanı, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2017 - 2021  
BAP Scientific Commissioner, Sivas Cumhuriyet University, Fen Fakültesi, Kimya Bölümü, 2017 - 2019

## Courses

Elemental Analiz için Atomik Spektroskopi-I, Doctorate, 2018 - 2019  
Gerçek Numunelerin Analizi, Postgraduate, 2019 - 2020  
Uzmanlık Alan Dersi, Postgraduate, 2019 - 2020  
Endüstri Kimyası - II, Undergraduate, 2018 - 2019  
Tez Çalışması, Postgraduate, 2018 - 2019  
Endüstri Kimyası - II, Undergraduate, 2018 - 2019  
Elemental Analiz İçin Atomik Spektroskopi-II, Doctorate, 2018 - 2019  
Endüstri Kimyası - I, Undergraduate, 2019 - 2020  
Uzmanlık Alan Dersi, Doctorate, 2019 - 2020  
Genel Kimya, Undergraduate, 2019 - 2020  
Tez Çalışması, Doctorate, 2018 - 2019  
Analitik Kimya, Undergraduate, 2019 - 2020  
Genel Kimya, Undergraduate, 2019 - 2020  
Analitik Kimya-II, Undergraduate, 2018 - 2019  
Genel Kimya II, Undergraduate, 2017 - 2018  
Analitik Kimya, Undergraduate, 2018 - 2019  
ANALİTİK KİMYA, Undergraduate, 2017 - 2018, 2016 - 2017  
Bitirme Ödevi/Tezi, Undergraduate, 2018 - 2019  
Analitik Kimyada Ultrasound, Doctorate, 2017 - 2018  
GENEL KİMYA LAB. I, Undergraduate, 2017 - 2018  
Genel Kimya Lab. - II, Undergraduate, 2017 - 2018  
ELEMENEL ANALİZ İÇİN ATOMİK SPEKTROSKOPİ-I, Postgraduate, 2017 - 2018  
İLERİ ELEKTRO ANALİTİK KİMYA, Postgraduate, 2017 - 2018  
Seminer Dersi, Postgraduate, 2017 - 2018  
ENDSTRİ KİMYASI II, Undergraduate, 2016 - 2017  
GERÇEK NUMUNELERİN ANALİZ, Postgraduate, 2016 - 2017  
Genel Kimya Laboratuvarı, Undergraduate, 2017 - 2018  
GENEL KİMYA LAB II, Undergraduate, 2016 - 2017  
İleri Elektroanalitik Kimya, Postgraduate, 2017 - 2018  
Endüstri Kimyası - II, Undergraduate, 2016 - 2017  
ÇEVRE KİRLİLİĞİ VE KONTROL METODLARI, Postgraduate, 2016 - 2017  
Genel Kimya II, Undergraduate, 2016 - 2017  
Çevre Kirliliği ve Kontrol Metodları, Postgraduate, 2016 - 2017  
ENDÜSTRİ KİMYASI-I, Undergraduate, 2016 - 2017  
Bitirme Ödevi/Tezi, Undergraduate, 2016 - 2017  
Genel Kimya Laboratuvarı, Undergraduate, 2016 - 2017  
Genel Kimya Laboratuvarı II, Undergraduate, 2015 - 2016  
Endüstri Kimyası - I, Undergraduate, 2014 - 2015  
Genel Kimya I, Undergraduate, 2013 - 2014  
Endüstri Kimyası - I, Undergraduate, 2014 - 2015  
Analitik Kimya - II, Undergraduate, 2012 - 2013  
Endüstri Kimyası - II, Undergraduate, 2012 - 2013  
Analitik Kimya - I, Undergraduate, 2012 - 2013  
Genel Kimya Laboratuvarı I, Undergraduate, 2012 - 2013  
Korozyon, Undergraduate, 2012 - 2013

Korozyon, Undergraduate, 2012 - 2013  
Genel Kimya I, Undergraduate, 2012 - 2013  
Endüstri Kimyası - I, Undergraduate, 2012 - 2013  
Genel Kimya - II, Undergraduate, 2011 - 2012  
Analitik kimya Lab. - II, Undergraduate, 2011 - 2012  
Analitik Kimya Lab., Undergraduate, 2009 - 2010  
Genel Kimya Laboratuvarı I, Undergraduate, 2010 - 2011  
Analitik Kimya Lab., Undergraduate, 2009 - 2010  
Analitik kimya Lab. - I, Undergraduate, 2009 - 2010  
Elektroanalitik Kimya, Undergraduate, 2009 - 2010  
Elektroanalitik Kimya, Undergraduate, 2009 - 2010  
Analitik Kimya-I, Undergraduate, 2005 - 2006  
Su Kimyası, Undergraduate, 2004 - 2005  
Su Kimyası, Undergraduate, 2004 - 2005  
Analitik Kimya, Undergraduate, 2004 - 2005  
Analitik Kimya-II, Undergraduate, 2003 - 2004

## Advising Theses

Elik A., ÇEŞİTLİ İÇECEK ve GIDA ÖRNEKLERİNDE PONCEAU 4R'İN BELİRLENMESİ İÇİN YENİ BİR ANALİTİK YÖNTEMİN GELİŞTİRİLMESİ, Postgraduate, S.MERAL(Student), 2019  
ELİK A., İlaç DNA etkileşiminin elektrokimyasal sensörler ile incelenmesi ve geliştirilmesi, Postgraduate, E.POLAT(Student), 2016  
ELİK A., Anaplasma phagocytophilum'un tayinine yönelik elektrokimyasal DNA sensörü geliştirilmesi ve uygulamaları, Postgraduate, Ç.CEYLAN(Student), 2015  
ELİK A., Hibrit Organik-İnorganik Membranların Hazırlanması, Karakterizasyonu ve Atık Su Arıtma İşlemlerinde Uygulanabilirliklerinin İncelenmesi, Doctorate, M.GÜNEY(Student), 2013  
ELİK A., Çeşitli gıda örneklerinin alüminyum, silisyum analizleri için hazırlanması, Postgraduate, S.ARSLAN(Student), 2010  
ELİK A., Çevresel metal kirliliğinin belirlenmesinde biyo-indikatör olarak biyo-kollektörlerin etkinliğinin araştırılması, Postgraduate, M.GÜNEY(Student), 2007  
ELİK A., Gerçek örneklerin analize hazırlanmasında ultrasonik liçing tekniğinin optimizasyonu, Postgraduate, H.GÜNGÖR(Student), 2003  
ELİK A., Sivas'ta trafik kökenli ağır metal kirliliğinin izlenmesi, Postgraduate, T.ÇINAR(Student), 2001

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

- I. **A deep eutectic solvent-based microextraction method for the extraction of Erythrosine from complex samples: statistical approach**  
FESLİYAN S., ELİK A.  
Journal of Food Composition and Analysis, vol.135, 2024 (SCI-Expanded)
- II. **Optimization of vortex-assisted supramolecular solvent-based liquid liquid microextraction for the determination of mercury in real water and food samples**  
Lanjwani M. F., ELİK A., Altunay A. Ö., Tuzen M., Haq H. U., Boczkaj G.  
Journal of Food Composition and Analysis, vol.134, 2024 (SCI-Expanded)
- III. **Investigation of ternary hydrophobic magnetic deep eutectic solvents for the selective extraction of acrylamide from processed food samples: Ultrasonic-assisted dispersive liquid-liquid microextraction and chemometric optimization**  
ELİK A., Ul Haq H., FESLİYAN S., ALTUNAY N.

Journal of Molecular Liquids, vol.411, 2024 (SCI-Expanded)

- IV. **Development of an orbital shaker-assisted fatty acid-based switchable solvent microextraction procedure for rapid and green extraction of amoxicillin from complex matrices: Central composite design**  
ELİK A., Demirkol Y., Ul Haq H., Boczkaj G., Sanaullah S., ALTUNAY N.  
Food Chemistry, vol.454, 2024 (SCI-Expanded)
- V. **Investigation of use of hydrophilic/hydrophobic NADESs for selective extraction of As(III) and Sb(III) ions in vegetable samples: Air assisted liquid phase microextraction and chemometric optimization**  
ELİK A., Doğan B., DEMİRBAŞ A., Haq H. U., Sanaullah S., ALTUNAY N.  
Food Chemistry, vol.451, 2024 (SCI-Expanded)
- VI. **Optimization of deep eutectic solvent based ultrasonic assisted microextraction for determination of zearalenone residues in foods**  
ELİK A., ALTUNAY N.  
Journal of Food Composition and Analysis, vol.132, 2024 (SCI-Expanded)
- VII. **Development of a vortex-assisted switchable-hydrophilicity solvent-based liquid phase microextraction for fast and reliable extraction of Zn (II), Fe (II), Pb (II), and Cd (II) from various baby food products**  
Ul Haq H., ELİK A., Isci G., Ekici M., GÜR SOY N., Boczkaj G., ALTUNAY N.  
Food Chemistry, vol.447, 2024 (SCI-Expanded)
- VIII. **Rapid and safe determination of vitamin B1 in dairy products, fruits, nuts and vitamin tablets: Combination of natural deep eutectic solvents, experimental design and artificial intelligence**  
YÜKSEK A. G., ELİK A., ALTUNAY N.  
Journal of Food Composition and Analysis, vol.131, 2024 (SCI-Expanded)
- IX. **Preparation and investigation of green and cheap deep eutectic solvents for determination of essential and toxic metal ions at trace levels in different coffee products**  
ELİK A., ALTUNAY N.  
Sustainable Chemistry and Pharmacy, vol.39, 2024 (SCI-Expanded)
- X. **Sensitive method for determination of benzoic acid in beverages and food samples using air-assisted hydrophobic deep eutectic solvent-based dispersive liquid-liquid microextraction**  
ALTUNAY N., Lanjwani M. F., Haq H. U., Tuzen M., ELİK A.  
Sustainable Chemistry and Pharmacy, vol.38, 2024 (SCI-Expanded)
- XI. **Sustainable vortex assisted liquid phase microextraction based on fatty acid switchable solvent for selective and accurate analysis of manganese in food samples**  
ELİK A., GÜR SOY N., ALTUNAY N.  
Chemical Papers, vol.78, no.5, pp.3261-3272, 2024 (SCI-Expanded)
- XII. **Magnetic hydrophobic deep eutectic solvents for orbital shaker-assisted dispersive liquid-liquid microextraction (MAGDES-OS-DLLME) - Determination of nickel and copper in food and water samples by FAAS**  
ELİK A., Haq H. U., Boczkaj G., FESLİYAN S., Ablak Ö., ALTUNAY N.  
Journal of Food Composition and Analysis, vol.125, 2024 (SCI-Expanded)
- XIII. **Combination of homogeneous liquid-liquid extraction and vortex assisted dispersive liquid-liquid microextraction for the extraction and analysis of ochratoxin A in dried fruit samples: Central composite design optimization**  
ELİK A., Ablak Ö., Haq H. U., Boczkaj G., ALTUNAY N.  
Journal of Food Composition and Analysis, vol.124, 2023 (SCI-Expanded)
- XIV. **Application of chemometric modeling for ionic liquid-based ultrasonic-assisted dispersive liquid-liquid microextraction: Analysis of fosetyl-aluminum in fruit and vegetable samples**  
Haq H. U., ELİK A., DURUKAN H., SARAÇ H., DEMİRBAŞ A., Boczkaj G., GÜR SOY N., ALTUNAY N.  
Journal of Food Composition and Analysis, vol.124, 2023 (SCI-Expanded)
- XV. **An air-assisted dispersive liquid phase microextraction method based on a hydrophobic magnetic**

**deep eutectic solvent for the extraction and preconcentration of melamine from milk and milk-based products**

ELİK A., FESLİYAN S., GÜRSOY N., Haq H. U., Castro-Muñoz R., ALTUNAY N.

Food Chemistry, vol.426, 2023 (SCI-Expanded)

- XVI. **Ultrasound-assisted dispersive liquid-liquid microextraction based on solidification of floating organic drop for analysis of propineb in water and food samples: Experimental modeling**  
ELİK A., ALTUNAY N.  
Sustainable Chemistry and Pharmacy, vol.35, 2023 (SCI-Expanded)
- XVII. **A new ultrasound-assisted liquid-liquid microextraction method utilizing a switchable hydrophilicity solvent for spectrophotometric determination of nitrite in food samples**  
ELİK A., Altunay A. Ö., Lanjwani M. F., Tuzen M.  
Journal of Food Composition and Analysis, vol.119, 2023 (SCI-Expanded)
- XVIII. **Optimization of vortex-assisted switchable hydrophilicity solvent liquid phase microextraction for the selective extraction of vanillin in different matrices prior to spectrophotometric analysis**  
ELİK A., ALTUNAY N.  
Food Chemistry, vol.399, 2023 (SCI-Expanded)
- XIX. **Determination and extraction of acrylamide in processed food samples using alkanol-based supramolecular solvent-assisted dispersive liquid-liquid microextraction coupled with spectrophotometer: Optimization using factorial design**  
ALTUNAY N., ELİK A., Tuzen M., Lanjwani M. F., Mogaddam M. R. A.  
Journal of Food Composition and Analysis, vol.115, 2023 (SCI-Expanded)
- XX. **Application of levulinic acid-based natural deep eutectic solvents for extraction and determination of deltamethrin in food samples**  
ELİK A., DURUKAN H., SARAÇ H., DEMİRBAŞ A., ALTUNAY N.  
SUSTAINABLE CHEMISTRY AND PHARMACY, vol.30, 2022 (SCI-Expanded)
- XXI. **Investigation of the applicability of fatty acid-based deep eutectic solvent based air assisted liquid liquid microextraction for the rapid determination and extraction of butylparaben in cosmetic products**  
Altunay A. Ö., ELİK A.  
Sustainable Chemistry and Pharmacy, vol.30, 2022 (SCI-Expanded)
- XXII. **Synthesized of poly(vinyl benzyl dithiocarbonate-dimethyl amino ethyl methacrylate) block copolymer as adsorbent for the vortex-assisted dispersive solid phase microextraction of patulin from apple products and dried fruits**  
TÜZEN M., Hazer B., ELİK A., ALTUNAY N.  
FOOD CHEMISTRY, vol.395, 2022 (SCI-Expanded)
- XXIII. **Synthesized of a novel xanthate functionalized polypropylene as adsorbent for dispersive solid phase microextraction of caffeine using orbital shaker in mixed beverage matrices**  
Altunay N., Tuzen M., Hazer B., Elik A.  
Food Chemistry, vol.393, 2022 (SCI-Expanded)
- XXIV. **Application of a new dithizone grafted polymeric adsorbent for solid phase microextraction of manganese and copper prior to FAAS in fortified vegetables and barbecue samples**  
Ulusoy S., Demirbaş A., Elik A., Altunay N., Sarp G., Yilmaz E., Ulusoy H. İ.  
CHEMICAL PAPERS, vol.76, no.10, pp.6153-6165, 2022 (SCI-Expanded)
- XXV. **Vortex assisted magnetic ionic liquid based dispersive liquid-liquid microextraction approach for determination of metribuzin in some plant samples with UV-Vis spectrophotometer**  
ELİK A., SARAÇ H., DURUKAN H., DEMİRBAŞ A., ALTUNAY N.  
MICROCHEMICAL JOURNAL, vol.181, 2022 (SCI-Expanded)
- XXVI. **A novel sonication assisted dispersive liquid-liquid microextraction method for methylparaben in cosmetic samples using deep eutectic solvent**  
Altunay A. O., ELİK A.  
SUSTAINABLE CHEMISTRY AND PHARMACY, vol.29, 2022 (SCI-Expanded)

- XXVII. **Application of central composite design in parameters optimization of nano-structured supramolecular solvent based on liquid-liquid microextraction for determination of total lead in food, vegetables, grilled meat products, and water samples**  
ELİK A.  
SUSTAINABLE CHEMISTRY AND PHARMACY, vol.29, 2022 (SCI-Expanded)
- XXVIII. **Chemometric approach for the spectrophotometric determination of chloramphenicol in various food matrices: Using natural deep eutectic solvents**  
Elik A., Altunay N.  
Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, vol.276, 2022 (SCI-Expanded)
- XXIX. **Assessment of arsenic in water, rice and honey samples using new and green vortex-assisted liquid phase microextraction procedure based on deep eutectic solvent: Multivariate study**  
ALTUNAY N., ELİK A., Farooque Lanjwani M., Tuzen M.  
Microchemical Journal, vol.179, 2022 (SCI-Expanded)
- XXX. **Optimization of magnetic ionic based dispersive liquid-liquid microextraction of cadmium in water and food samples using experimental design prior to flame atomic absorption spectrophotometry**  
Elik A., Altunay N.  
Sustainable Chemistry and Pharmacy, vol.27, 2022 (SCI-Expanded)
- XXXI. **Synthesis, characterization, and application of polyacrylamide/carmine polymer nanomaterial as an effective solid-phase material for ultrasonic-assisted solid-phase microextraction of aluminum and chromium in vegetable samples**  
Ulusoy S., Elik A., Ulusoy H. İ., Şimşek S., Altunay N.  
CHEMICAL PAPERS, vol.76, no.3, pp.1553-1565, 2022 (SCI-Expanded)
- XXXII. **Experimental design of ligandless sonication-assisted liquid- phases microextraction based on hydrophobic deep eutectic solvents for accurate determination of Pb(II) and Cd(II) from waters and food samples at trace levels**  
ELİK A., DEMİRBAŞ A., ALTUNAY N.  
FOOD CHEMISTRY, vol.371, 2022 (SCI-Expanded)
- XXXIII. **Optimization and application of ultrasound-assisted sugar based deep eutectic solvent dispersive liquid-liquid microextraction for the determination and extraction of aflatoxin M1 in milk samples**  
GÜRSOY N., Sırtbaşı B., ŞİMŞEK S., ELİK A., ALTUNAY N.  
Microchemical Journal, vol.172, 2022 (SCI-Expanded)
- XXXIV. **Tergitol@SiO<sub>2</sub>@Fe<sub>3</sub>O<sub>4</sub> magnetic nano-material and experimental design methodology: An effective and selective adsorbent for solid phase microextraction and flame atomic absorption spectrometric analysis of lead in different matrixes**  
ALTUNAY N., ELİK A., SARP G., YILMAZ E., ULUSOY H. İ.  
MICROCHEMICAL JOURNAL, vol.170, 2021 (SCI-Expanded)
- XXXV. **Ionic hydrophobic deep eutectic solvents in developing air-assisted liquid-phase microextraction based on experimental design: Application to flame atomic absorption spectrometry determination of cobalt in liquid and solid samples**  
ELİK A., BİNGÖL D., ALTUNAY N.  
FOOD CHEMISTRY, vol.350, 2021 (SCI-Expanded)
- XXXVI. **Investigations of Hg(II) analysis in real samples via computational chemistry, experimental design, and green microextraction approach**  
Altunay N., Elik A., Demirbaş A., Kaya S., Maslov M.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.102, no.102, pp.104042, 2021 (SCI-Expanded)
- XXXVII. **Experimental and theoretical investigation for the spectrophotometric determination of thiabendazole in fruit samples**  
Tüzen M., Altunay N., Elik A., Afshar Mogaddam M. R., Katin K.  
MICROCHEMICAL JOURNAL, vol.168, no.168, pp.106488, 2021 (SCI-Expanded)
- XXXVIII. **Ultrasound-assisted alkanol-based nanostructured supramolecular solvent for extraction and determination of cadmium in food and environmental samples: Experimental design methodology**

- ALTUNAY N., ELİK A.  
MICROCHEMICAL JOURNAL, vol.164, 2021 (SCI-Expanded)
- XXXIX. **Ultrasound-assisted supramolecular solvent dispersive liquid-liquid microextraction for preconcentration and determination of Cr(VI) in waters and total chromium in beverages and vegetables**  
Tuzen M., ELİK A., ALTUNAY N.  
JOURNAL OF MOLECULAR LIQUIDS, vol.329, 2021 (SCI-Expanded)
- XL. **Response surface methodology based on central composite design for optimizing temperature-controlled ionic liquid-based microextraction for the determination of histamine residual in canned fish products**  
ELİK A.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.98, 2021 (SCI-Expanded)
- XLII. **Optimization of an ultrasound-assisted alcohol-based deep eutectic solvent dispersive liquid-phase microextraction for separation and preconcentration of quercetin in wine and food samples with response surface methodology**  
ALTUNAY N., ELİK A., ÜNAL Y., KAYA S.  
JOURNAL OF SEPARATION SCIENCE, vol.44, no.9, pp.2006-2014, 2021 (SCI-Expanded)
- XLIII. **A new analytical approach for preconcentration, separation and determination of Pb(II) and Cd(II) in real samples using a new adsorbent: Synthesis, characterization and application**  
Altunay N., Hazer B., Tüzen M., Elik A.  
FOOD CHEMISTRY, vol.359, pp.129923, 2021 (SCI-Expanded)
- XLIII. **Optimization of green and rapid analytical procedure for the extraction of patulin in fruit juice and dried fruit samples by air-assisted natural deep eutectic solvent-based solidified homogeneous liquid phase microextraction using experimental design and computational chemistry approach**  
Taşpınar H., Elik A., Kaya S., Altunay N.  
FOOD CHEMISTRY, vol.358, pp.129817, 2021 (SCI-Expanded)
- XLIV. **Optimization of vortex-assisted ionic liquid dispersive liquid-liquid microextraction by experimental design prior to hydride generation atomic absorption spectrometry for determination of selenium species in food, beverage and water samples**  
Altunay N., Elik A., Katin K.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.99, pp.103871, 2021 (SCI-Expanded)
- XLV. **Development of sensitive and accurate solid-phase microextraction procedure for preconcentration of As(III) ions in real samples**  
Elik A., Tüzen M., Hazer B., Kaya S., Katina K., Altunay N.  
Scientific Reports, vol.1, no.1, pp.1-2, 2021 (SCI-Expanded)
- XLVI. **Feasibility of supramolecular nanosized solvent based microsyringe-assisted liquid-phase microextraction for preconcentration and separation of Vitamin B12 from infant formula, food supplement, and dairy products: Spectrophotometric analysis and chemometric optimization**  
Altunay N., Elik A., Aydın D.  
MICROCHEMICAL JOURNAL, vol.165, no.165, pp.106105, 2021 (SCI-Expanded)
- XLVII. **Ultrasonic-assisted cloud point microextraction and spectrophotometric determination of Ponceau 4R in various beverage samples using nonionic surfactant PONPE 7.5**  
Meral S., Elik A.  
FOOD ADDITIVES AND CONTAMINANTS - PART A CHEMISTRY, ANALYSIS, CONTROL, EXPOSURE AND RISK ASSESSMENT, vol.38, no.4, pp.573-585, 2021 (SCI-Expanded)
- XLVIII. **Flame atomic absorption spectrometric determination of total chromium and cadmium in bean samples after ultrasonic-assisted microextraction using ionic liquid Aliquat-336**  
Elik A., Karaköy T., Çilesiz Y., Altunay N.  
Journal Of The Iranian Chemical Society, vol.1, no.18, pp.117-127, 2021 (SCI-Expanded)
- XLIX. **Poly(styrene)-co-2-vinylpyridine copolymer as a novel solid-phase adsorbent for determination of manganese and zinc in foods and vegetables by FAAS**

Tuzen M., ELİK A., Hazer B., ŞİMŞEK S., ALTUNAY N.

Food Chemistry, vol.333, 2020 (SCI-Expanded)

- L. **Theoretical and experimental studies aimed at the development of vortex-assisted supramolecular solvent microextraction for determination of nickel in plant samples by FAAS**  
Maslov M. M., ELİK A., DEMİRBAŞ A., Katin K. P., ALTUNAY N.  
MICROCHEMICAL JOURNAL, vol.159, 2020 (SCI-Expanded)
- LI. **Spectrophotometric determination of aflatoxin B1 in food sample: Chemometric optimization and theoretical supports for reaction mechanisms and binding regions**  
ALTUNAY N., Katin K. P., GÜRSOY N., ELİK A., ŞİMŞEK S., KAYA S.  
Journal of Food Composition and Analysis, vol.94, 2020 (SCI-Expanded)
- LII. **A green and efficient vortex-assisted liquid-phase microextraction based on supramolecular solvent for UV-VIS determination of nitrite in processed meat and chicken products**  
ALTUNAY N., ELİK A.  
FOOD CHEMISTRY, vol.332, 2020 (SCI-Expanded)
- LIII. **A simple and quick ionic liquid-based ultrasonic-assisted microextraction for determination of melamine residues in dairy products: Theoretical and experimental approaches**  
ALTUNAY N., ELİK A., KAYA S.  
Food Chemistry, vol.326, 2020 (SCI-Expanded)
- LIV. **Alcohol-DES based vortex assisted homogenous liquid-liquid microextraction approach for the determination of total selenium in food samples by hydride generation AAS: Insights from theoretical and experimental studies**  
ALTUNAY N., ELİK A., KAYA S.  
TALANTA, vol.215, 2020 (SCI-Expanded)
- LV. **Surface decontamination of white cheese by pulsed UV light treatment**  
KEKLİK N. M., ELİK A., SALGIN U., Demirci A., Kocer G.  
JOURNAL OF FOOD SAFETY AND FOOD QUALITY-ARCHIV FÜR LEBENSMITTELHYGIENE, vol.71, no.4, pp.86-92, 2020 (SCI-Expanded)
- LVI. **Towards green analysis of curcumin from tea, honey and spices: Extraction by deep eutectic solvent assisted emulsification liquid-liquid microextraction method based on response surface design**  
ALTUNAY N., ÜNAL Y., ELİK A.  
FOOD ADDITIVES AND CONTAMINANTS PART A-CHEMISTRY ANALYSIS CONTROL EXPOSURE & RISK ASSESSMENT, vol.37, no.6, pp.869-881, 2020 (SCI-Expanded)
- LVII. **Determination of paracetamol in synthetic urea and pharmaceutical samples by shaker-assisted deep eutectic solvent microextraction and spectrophotometry**  
Dogan B., ELİK A., ALTUNAY N.  
MICROCHEMICAL JOURNAL, vol.154, 2020 (SCI-Expanded)
- LVIII. **Preparation and application of alcohol based deep eutectic solvents for extraction of curcumin in food samples prior to its spectrophotometric determination**  
Altunay N., Elik A., Gürkan R.  
FOOD CHEMISTRY, vol.310, 2020 (SCI-Expanded)
- LIX. **Usage of the newly synthesized Poly(3-hydroxy butyrate)-b-poly(vinyl benzyl xanthate) block copolymer for vortex-assisted solid-phase microextraction of cobalt (II) and nickel (II) in canned foodstuffs**  
Altunay N., Tüzen M., Hazer B., Elik A.  
FOOD CHEMISTRY, vol.321, no.321, pp.126690, 2020 (SCI-Expanded)
- LX. **Analysis of zinc and chromium in grain samples using ionic-liquid-based ultrasound-assisted microextraction followed by flame-AAS after microwave digestion**  
Altunay N., Elik A., Demirbaş A.  
Biological Trace Element Research, vol.1, no.1, pp.1, 2020 (SCI-Expanded)
- LXI. **Simple and green heat-induced deep eutectic solvent microextraction for determination of lead and cadmium in vegetable samples by flame atomic absorption spectrometry: A multivariate study**



- Altunay N., Elik A., Bingöl D.  
Biological Trace Element Research, vol.1, no.1, pp.1, 2020 (SCI-Expanded)
- LXII. **Inactivation of Staphylococcus aureus and Escherichia coli O157:H7 on fresh kashar cheese with pulsed ultraviolet light**  
KEKLİK N. M., ELİK A., SALGIN U., Demirci A., Kocer G.  
FOOD SCIENCE AND TECHNOLOGY INTERNATIONAL, vol.25, no.8, pp.680-691, 2019 (SCI-Expanded)
- LXIII. **Vortex assisted-ionic liquid dispersive liquid-liquid microextraction and spectrophotometric determination of quercetin in tea, honey, fruit juice and wine samples after optimization based on response surface methodology**  
Altunay N., Bingöl D., Elik A., Gürkan R.  
SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY, vol.221, 2019 (SCI-Expanded)
- LXIV. **Innovative and practical deep eutectic solvent based vortex assisted microextraction procedure for separation and preconcentration of low levels of arsenic and antimony from sample matrix prior to analysis by hydride generation-atomic absorption spectrometry**  
Altunay N., Elik A., Gürkan R.  
FOOD CHEMISTRY, vol.293, pp.378-386, 2019 (SCI-Expanded)
- LXV. **A novel, green and safe ultrasound-assisted emulsification liquid phase microextraction based on alcohol-based deep eutectic solvent for determination of patulin in fruit juices by spectrophotometry**  
Altunay N., Elik A., Gürkan R.  
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.82, 2019 (SCI-Expanded)
- LXVI. **Development of a chemometric-assisted deep eutectic solvent-based microextraction procedure for extraction of caffeine in foods and beverages**  
ELİK A., ÜNAL Y., ALTUNAY N.  
FOOD ADDITIVES AND CONTAMINANTS PART A-CHEMISTRY ANALYSIS CONTROL EXPOSURE & RISK ASSESSMENT, vol.36, no.8, pp.1139-1150, 2019 (SCI-Expanded)
- LXVII. **A Simple and Green Microextraction Procedure for Extraction of Morin in Food and Beverages Using Ionic Liquid**  
ALTUNAY N., ELİK A., GÜRKAN R.  
FOOD ANALYTICAL METHODS, vol.12, no.8, pp.1747-1758, 2019 (SCI-Expanded)
- LXVIII. **Developing a new and simple natural deep eutectic solvent based ultrasonic-assisted microextraction procedure for determination and preconcentration of As and Se from rice samples**  
ELİK A., DEMİRBAŞ A., ALTUNAY N.  
ANALYTICAL METHODS, vol.11, no.27, pp.3429-3438, 2019 (SCI-Expanded)
- LXIX. **Natural deep eutectic solvent-based ultrasound-assisted-microextraction for extraction, preconcentration and analysis of methylmercury and total mercury in fish and environmental waters by spectrophotometry**  
Altunay N., Elik A., Gürkan R.  
FOOD ADDITIVES AND CONTAMINANTS PART A-CHEMISTRY ANALYSIS CONTROL EXPOSURE & RISK ASSESSMENT, vol.36, no.7, pp.1079-1097, 2019 (SCI-Expanded)
- LXX. **Monitoring of some trace metals in honeys by flame atomic absorption spectrometry after ultrasound assisted-dispersive liquid liquid microextraction using natural deep eutectic solvent**  
Altunay N., Elik A., Gürkan R.  
MICROCHEMICAL JOURNAL, vol.147, pp.49-59, 2019 (SCI-Expanded)
- LXXI. **Vortex assisted-ionic liquid based dispersive liquid liquid microextraction of low levels of nickel and cobalt in chocolate-based samples and their determination by FAAS**  
ALTUNAY N., ELİK A., GÜRKAN R.  
MICROCHEMICAL JOURNAL, vol.147, pp.277-285, 2019 (SCI-Expanded)
- LXXII. **Ultrasound-Assisted Low-Density Solvent-Based Dispersive Liquid-Liquid Microextraction Coupled to Spectrophotometry for the Determination of Low Levels of Histamine in Fish and Meat Products**

- Elik A., Altunay N., Gürkan R.  
FOOD ANALYTICAL METHODS, vol.12, no.12, pp.489-502, 2019 (SCI-Expanded)
- LXXIII. **Extraction and reliable determination of acrylamide from thermally processed foods using ionic liquid-based ultrasound-assisted selective microextraction combined with spectrophotometry**  
ALTUNAY N., ELİK A., GÜRKAN R.  
FOOD ADDITIVES AND CONTAMINANTS PART A-CHEMISTRY ANALYSIS CONTROL EXPOSURE & RISK ASSESSMENT, vol.35, no.2, pp.222-232, 2018 (SCI-Expanded)
- LXXIV. **Application of simple, fast and eco-friendly ultrasound-assisted-cloud point extraction for pre-concentration of zinc, nickel and cobalt from foods and vegetables prior to their flame atomic absorption spectrometric determinations**  
ALTUNAY N., ELİK A., Bulutlu C., GÜRKAN R.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.98, no.7, pp.655-675, 2018 (SCI-Expanded)
- LXXV. **Microextraction and preconcentration of Mn and Cd from vegetables, grains and nuts prior to their determination by flame atomic absorption spectrometry using room temperature ionic liquid**  
ELİK A., ALTUNAY N., GÜRKAN R.  
JOURNAL OF MOLECULAR LIQUIDS, vol.247, pp.262-268, 2017 (SCI-Expanded)
- LXXVI. **Comparison of Probe with Bath Ultrasonic Leaching Procedures for Preparation to Heavy Metal Analysis of Bio-Collectors Prior to Atomic Absorption Spectrometry**  
GÜNEY M., ELİK A.  
COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS, vol.48, no.15, pp.1741-1752, 2017 (SCI-Expanded)
- LXXVII. **Atomic Absorption Determination of Metals in Superficial Roadside Soils Using Ultrasonic Sample Preparation**  
ELİK A.  
ASIAN JOURNAL OF CHEMISTRY, vol.21, no.7, pp.5095-5103, 2009 (SCI-Expanded)
- LXXVIII. **Comparison of ultrasound-assisted leaching with conventional and acid bomb digestion for determination of metals in sediment samples**  
Gungor H., Elik A.  
MICROCHEMICAL JOURNAL, vol.86, no.1, pp.65-70, 2007 (SCI-Expanded)
- LXXIX. **Ultrasonic-assisted leaching of trace metals from sediments as a function of pH**  
Elik A.  
TALANTA, vol.71, no.2, pp.790-794, 2007 (SCI-Expanded)
- LXXX. **Ultrasound assisted pseudo-digestion of street dust samples prior to determination by atomic absorption spectrometry**  
Elik A.  
TALANTA, vol.66, no.4, pp.882-888, 2005 (SCI-Expanded)
- LXXXI. **Heavy metal accumulation in street dust samples in Sivas**  
Elik A.  
COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS, vol.34, pp.145-156, 2003 (SCI-Expanded)
- LXXXII. **Determination of heavy metals in bio-collectors as indicator of environmental pollution**  
Cinar T., Elik A.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.82, no.5, pp.321-329, 2002 (SCI-Expanded)
- LXXXIII. **Monitoring of heavy metals in urban snow as indicator of atmosphere pollution**  
Elik A.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.82, no.1, pp.37-45, 2002 (SCI-Expanded)
- LXXXIV. **Sequential ultrasonic leaching of strontium from sediments**  
Elik A., Akcay M.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.80, no.4, pp.257-267, 2001 (SCI-Expanded)

- LXXXV. **Ultrasonic leaching of bio-collectors for heavy metal analysis**  
Elik A., Akçay M., Sokmen M.  
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.77, no.2, pp.133-145, 2000 (SCI-Expanded)
- LXXXVI. **Alevli Atomik Absorpsiyon Spektrometrik ve Manganimetrik Yöntemlerle Belirlenmek Üzere Sediment ve Filizlerden Majör Minör ve Eser Düzeydeki Bazı Metallerin Ultrasonik Etki Altında Çözeltiye Alınması**  
ELİK A., AKÇAY M., SAVAŞCI Ş.  
Turkish Journal of Chemistry, vol.15, no.2, pp.130-139, 1991 (SCI-Expanded)
- LXXXVII. **EFFECT OF ULTRASONICATION ON EXTRACTION RATE AND ON RECOVERY OF STRONTIUM FROM RIVER SEDIMENT USING FLAME ATOMIC-ABSORPTION SPECTROMETRY**  
AKCAY M., ELIK A., SAVASCI S.  
ANALYST, vol.114, no.9, pp.1079-1082, 1989 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Chemometric-Based Optimization of Ionic Liquid-Based Dispersive Liquid-Liquid Microextraction for Separation and Preconcentration of Erythrosine from Real Matrices**  
ELİK A., ALTUNAY N.  
CUMHURİYET SCIENCE JOURNAL, vol.43, 2022 (Peer-Reviewed Journal)
- II. **Interference-free determination of carmine in food samples using ultrasonic assisted cloud point extraction coupled with spectrophotometry**  
Elik A.  
Cumhuriyet Science Journal, vol.40, no.2, pp.305-316, 2019 (Peer-Reviewed Journal)
- III. **Development of Electrochemical DNA Sensor for The Determination of Anaplasma Phagocytophilum**  
Elik A., Gökçe G., Ceylan Ç.  
Cumhuriyet Science Journal, vol.38, no.4, pp.748-758, 2017 (Peer-Reviewed Journal)
- IV. **Electrochemical Determination of Interaction between Anticancer Drug Epirubicin and DNA by DNA Biosensors**  
Elik A., Gökçe G., Bostancı E., Kızılluk D.  
Cumhuriyet Science Journal, vol.38, no.3, pp.525-534, 2017 (Peer-Reviewed Journal)
- V. **Determination of Trace Levels of Nitrite in Beverages Samples Through Micellar Improved Catalytic Kinetic Spectrophotometry**  
Elik A., Altunay N., Gürkan R.  
Cumhuriyet Science Journal, vol.38, no.3, pp.400-411, 2017 (Peer-Reviewed Journal)
- VI. **Çimento Fabrikası Kaynaklı Metal ve Partikül Kirliliğinin Biyo Toplayıcılarla İzlenmesi**  
Elik A.  
C.Ü. Fen Bilimleri Dergisi, vol.28, pp.1-11, 2003 (Peer-Reviewed Journal)
- VII. **Sivas Kenti'nde Ağır Metal Kirliliğinin Yerel Ve Zamansal Değişimi**  
Elik A., Akçay M.  
Turkish Journal of Engineering and Environmental Sciences, vol.24, no.1, pp.15-24, 2000 (Scopus)

### Refereed Congress / Symposium Publications in Proceedings

- I. **GREEN AND CHEAP SONICATION ASSISTED CLOUD POINT MICROEXTRACTION FOR EXTRACTION OF ALLURA RED (E129) FROM BEVERAGES SAMPLES PRIOR TO ITS SPECTROPHOTOMETRIC DETERMINATION**  
ALTUNAY N., ELİK A.  
ANKARA INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCH-IX, Ankara, Turkey, 26 December 2023

- II. **INVESTIGATION AND OPTIMIZATION OF SUGAR-BASED DEEP EUTECTIC SOLVENTS FOR EXTRACTION OF SULFADIAZINE FROM HONEY SAMPLES PRIOR TO SPECTROPHOTOMETRIC ANALYSIS**  
TAŞPINAR H., ALTUNAY N., ELİK A.  
ANKARA INTERNATIONAL CONGRESS ON SCIENTIFIC RESEARCH-IX, Ankara, Turkey, 26 - 28 December 2023
- III. **TEMPERATURE ASSISTED CLOUD POINT EXTRACTION FOR SPECTROPHOTOMETRIC DETERMINATION OF SUDAN-III IN VARIOUS SPICE SAMPLES**  
ALTUNAY N., ELİK A.  
EGE 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, İzmir, Turkey, 22 - 24 December 2023
- IV. **USE AND OPTIMIZATION OF IONIC LIQUIDS FOR THE DETERMINATION OF TRACE LEVELS OF CADMIUM IN SOME AGRICULTURAL PRODUCTS**  
DOĞAN B., ALTUNAY N., ELİK A.  
EGE 10TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, İzmir, Turkey, 22 - 24 December 2023
- V. **DISPERSIVE LIQUID PHASE EXTRACTION METHOD FOR THE DETERMINATION OF HISTAMINE FROM PROCESSED MEAT PRODUCTS**  
ALTUNAY N., ELİK A.  
SELCUK 9TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Konya, Turkey, 15 - 17 December 2023
- VI. **INVESTIGATION OF DEEP EUTECTIC SOLVENTS FOR THE DETERMINATION OF SULFADIAZINE RESIDUES IN HONEY SAMPLES**  
TAŞPINAR H., ALTUNAY N., ELİK A.  
SELCUK 9TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Konya, Turkey, 15 - 17 December 2023
- VII. **OPTIMIZATION OF A VORTEX-ASSISTED IONIC LIQUID-BASED LIQUID PHASE MICROEXTRACTION METHOD FOR RAPID AND SENSITIVE DETERMINATION OF CADMIUM FROM ENVIRONMENTAL SAMPLES**  
DOĞAN B., ALTUNAY N., ELİK A.  
11th INTERNATIONAL MARDIN ARTUKLU SCIENTIFIC RESEARCHES CONFERENCE, Mardin, Turkey, 13 - 15 December 2023
- VIII. **DETERMINATION OF CARMINE IN SOME FOOD SAMPLES: ULTRASONIC ASSISTED CLOUD POINT EXTRACTION**  
ALTUNAY N., ELİK A.  
11th INTERNATIONAL MARDIN ARTUKLU SCIENTIFIC RESEARCHES CONFERENCE, Mardin, Turkey, 13 - 15 December 2023
- IX. **IONIC LIQUID BASED VORTEX ASSISTED DISPERSIVE LIQUID MICROEXTRACTION METHOD BEFORE SPECTROPHOTOMETRIC DETERMINATION OF MORIN IN FRUIT JUICES**  
ALTUNAY N., ELİK A.  
11. INTERNATIONAL SUMMIT SCIENTIFIC RESEARCH CONGRESS, Diyarbakır, Turkey, 15 - 17 December 2023
- X. **PREPARATION AND OPTIMIZATION OF NATURAL DEEP EUTECTIC SOLVENTS FOR ACCURATE, RELIABLE AND RAPID EXTRACTION OF AS(III) FROM VEGETABLE SAMPLES**  
ALTUNAY N., ELİK A., DEMİRBAŞ A., DOĞAN B.  
11. INTERNATIONAL SUMMIT SCIENTIFIC RESEARCH CONGRESS, Diyarbakır, Turkey, 15 - 17 December 2023
- XI. **GIDA ÖRNEKLERİNDE Mn(II) VE Cu(II) İYONLARININ DUYARLI TAYİNLERİ İÇİN KATI FAZ EKSTRAKSİYONU TEMELLİ ÖRNEK HAZIRLAMA YÖNTEMİ GELİŞTİRİLMESİ**  
ULUSOY S., ELİK A., ALTUNAY N., SARP G., YILMAZ E., ULUSOY H. İ.  
10.Ulusal Analitik Kimya Kongresi, Muğla, Turkey, 7 - 11 September 2022
- XII. **Synthesis of Polyacrylamide/Carmine Polymer Nanomaterial as an Effective Solid-Phase Material for Ultrasonic-Assisted Solid-Phase Microextraction of Aluminum and Chromium in Vegetable Samples**  
Ulusoy S., Elik A., Ulusoy H. İ., Şimşek S., Altunay N.  
2nd European Sample Preparation e-Conference, Oslo, Norway, 14 March 2022
- XIII. **Monitoring of Heavy Metals in Environmental Samples; Bio-Indicators and Applications**  
Elik A.  
2 nd International Environmental Chemistry Congress, Antalya, Turkey, 31 October - 03 November 2019, pp.44
- XIV. **Determination of Lead and Cadmium in Some Honey: A Simple Microextraction Approach**

- Altunay N., Elik A.  
2nd International Environmental Chemistry Congress, Antalya, Turkey, 31 October - 03 November 2019
- XV. **Optimization of Nickel Ions in Foods by Box-Behnken Design Prior to its Determination by FAAS**  
Aydm D., Elik A., Bingöl D., Altunay N.  
2nd International Environmental Chemistry Congress, Antalya, Turkey, 31 October - 03 November 2019
- XVI. **A New Extraction Procedure for the Determination of Ponceau 4R (E124) in Fruit-Flavored Beverages**  
Elik A., Meral S.  
2nd International Environmental Chemistry Congress, Antalya, Turkey, 31 October - 03 November 2019, pp.105
- XVII. **PRECONCENTRATION/SEPARATION OF CD AND CR IN ENVIRONMENTAL WATER SAMPLES BY ULTRASONIC-ASSISTED IONIC LIQUID-BASED MICROEXTRACTION**  
Altunay N., Elik A., Meral S.  
VIII. UMTEBINTERNATIONALCONGRESS ON VOCATIONAL TECHNICAL SCIENCES, Sivas, Turkey, 11 - 13 October 2019, pp.165-173
- XVIII. **Green and inexpensive extraction procedure for determination of lead in honeys by flame atomic absorption spectrometry**  
Altunay N., Elik A.  
Eurasia 3rd international congress of applied sciences, Sivas, Turkey, 28 - 30 June 2019, pp.146-152
- XIX. **DEVELOPMENT OF A NEW ANALYTICAL METHOD FOR THE DETERMINATION OF PONCEAU 4R IN VARIOUS DRINK AND FOOD SAMPLES**  
Elik A., Meral S.  
3rd INTERNATIONAL CONGRESS OF APPLIED SCIENCES, Sivas, Turkey, 28 - 30 June 2019, pp.2
- XX. **ULTRASONIC LEACHING PROCEDURES FOR PREPARATION TO HEAVY METAL ANALYSIS OF Lolium Perenne PRIOR TO FAAS**  
Elik A.  
3rd INTERNATIONAL CONGRESS OF APPLIED SCIENCES, Sivas, Turkey, 28 - 30 June 2019, pp.29
- XXI. **DEVELOPMENT OF A NEW ANALYTICAL METHOD FOR THE DETERMINATION OF PONCEAU 4R IN VARIOUS DRINK AND FOOD SAMPLES**  
ELİK A., MERAL S.  
3rd INTERNATIONAL CONGRESS OF APPLIED SCIENCES, 28 - 30 June 2019
- XXII. **ULTRASONIC LEACHING PROCEDURES FOR PREPARATION TO HEAVY METAL ANALYSIS OF Lolium Perenne PRIOR TO FAAS**  
ELİK A.  
3rd INTERNATIONAL CONGRESS OF APPLIED SCIENCES, 28 - 30 June 2019
- XXIII. **Ionic Liquid Assisted Microextraction Followed By Uv-Vis Spectrophotometric Quantification Of Total Mercury In Fish Samples**  
Elik A., Gürkan R., Altunay N.  
International Trace Analysis Congress, Sivas, Turkey, 20 - 23 June 2018
- XXIV. **Coupling of Ionic Liquid Based Microextraction and Spectrophotometry for Extraction, Preconcentration and Determination of Low Levels of Histamine in Fish and Meat Products**  
Elik A., Gürkan R., Altunay N.  
International Trace Analysis Congress, Sivas, Turkey, 20 - 23 June 2018
- XXV. **Ultrasound-Assisted Extraction of Nickel and Cobalt from Food Samples and Their Determination by Flame-AAS**  
Elik A., Meral S., Gürkan R., Altunay N.  
International Trace Analysis Congress, Sivas, Turkey, 20 - 23 June 2018
- XXVI. **DETERMINATION OF TRACE CD AND SN CONTENT IN CANNED FOODS AND VEGETABLE SAMPLES USING MICROEXTRACTION COUPLED WITH FLAME ATOMIC ABSORPTION SPECTROMETRY**  
Elik A., Gürkan R., Altunay N.  
International Conference on Technology, Engineering and Science (IConTES), Antalya, Turkey, 26 - 29 October 2017

- XXVII. **SEPARATION AND PRECONCENTRATION OF CU, NI AND FE WITH VORTEX ASSISTED MICROEXTRACTION METHOD AND THEIR DETERMINATION IN FOOD AND VEGETABLE SAMPLES**  
Altunay N., Elik A., Gürkan R.  
International Conference on Technology, Engineering and Science (IconTES), Antalya, Turkey, 26 - 29 October 2017
- XXVIII. **Topaklamayı Önleyici Ajan Katkılı Bazı Gıda Örneklerinin ICP-AES İle Al Ve Si Analizlerine Hazırlanması**  
ELİK A., ARSLAN S.  
I. International Scientific and Vocational Studies Congress, 5 - 08 October 2017
- XXIX. **FAAS Yardımıyla Çinko, Nikel Ve Kobaltın Ekstraksiyonu Ve Tayini İçin Yeni Ve Çevre Dostu Bir Ultrason Yardımıyla Mikro Ekstraksiyon Yöntem**  
Gürkan R., Elik A., Altunay N.  
I. International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 October 2017
- XXX. **Ultrasonic Assisted Microextraction of As and Sb from Water and Plant Samples as Determined by HG-AAS**  
Altunay N., Elik A., Gürkan R.  
Ancon-International Congress on Chemistry and Materials Science, Ankara, Turkey, 5 - 07 October 2017
- XXXI. **A NOVEL AND ECO-FRIENDLY ULTRASOUND ASSISTED MICROEXTRACTION METHOD FOR EXTRACTION AND DETERMINATION OF ZINC, NICKEL AND COBALT BY FAAS**  
Gürkan R., Elik A., Altunay N.  
I. International Scientific and Vocational Studies Congress, Nevşehir, Turkey, 5 - 08 October 2017
- XXXII. **Balık Örneklerinde Histaminin Ultrasonik Destekli Örnek Hazırlama ve İyonik Sıvı Yardımlı Mikroekstraksiyon Sonrası Spektrofotometrik Belirlenmesi**  
Altunay N., Elik A., Gürkan R.  
29. Ulusal Kimya kongresi, Ankara, Turkey, 10 - 14 September 2017
- XXXIII. **Effect of pulsed UV light on the quality of white and kasar cheese**  
KEKLİK N. M., DEMİRCİ A., ELİK A., SALGIN U.  
3 rd International ISEKI Food Conference, 21 May 2014 - 23 May 2015
- XXXIV. **Label-free electrochemical DNA biosensor for the detection of Toxoplasma gondii from PCR amplified real samples**  
GÖKÇE G., CEYLAN Ç., POLAT E., YALÇINKAYA B., ELİK A.  
18. INTERNATIONAL BIOMEDICAL SCIENCE AND TECHNOLOGY SYMPOSIUM, 9 - 12 September 2012
- XXXV. **Biyo-kollektörlerin ağır metal analizine hazırlanmasında problu ve banyolu ultrasonik liçing yöntemlerinin optimizasyonu**  
GÜNEY M., ELİK A.  
23. Ulusal Kimya Kongresi, Turkey, 16 June - 20 November 2009
- XXXVI. **Ağır metal analizinde biyo indikatör olarak biyo kollektörlerin kullanımı**  
GÜNEY M., ELİK A.  
XXII. Kimya Kongresi, Turkey, 04 February 2008
- XXXVII. **Çevre kirliliğinin indikatörü olarak biyo kollektörlerde POACEAE ve ACERACEAE ağır metallerin belirlenmesi**  
GÜNEY M., ELİK A.  
IV. Ulusal Analitik Kimya Kongresi, Turkey, 04 February 2008
- XXXVIII. **Cadde Tozu ve Toprak Örneklerinde Ağır Metallerin Belirlenmesi İçin Ultrasonik Liçing Tekniğinin Optimizasyonu**  
GÜNGÖR H., ELİK A.  
XVII. Ulusal Kimya Kongresi, İstanbul, Turkey, 8 - 11 September 2003, pp.67
- XXXIX. **Gerçek Numunelerin Analize Hazırlanmasında Ultrasonik Liçing Tekniğinin Geleneksel ve Asit Bombası Teknikleriyle Karşılaştırılması**  
GÜNGÖR H., ELİK A.  
XVII. Ulusal Kimya Kongresi, İstanbul, Turkey, 8 - 11 September 2003, pp.68

- XL. **Cadde tozu ve toprak örneklerinde ağır metallerin belirlenmesi için ultrasonik destekli asidik liçing tekniğinin optimizasyonu**  
ELİK A.  
XVII. Kimya Kongresi, Turkey, 03 February 2003
- XLI. **Gerçek numunelerin analize hazırlanmasında ultrasonik liçing tekniğinin geleneksel ve asit bombası teknikleriyle karşılaştırılması**  
ELİK A.  
XVII. Kimya Kongresi, Turkey, 03 February 2003
- XLII. **Sediment ve Filizlerden Mn, Zn, Pb, Ni ve Fe nin Ultrasonik liçingine çözücü etkileri**  
DURGUN G., ELİK A.  
XVI. Ulusal Kimya Kongresi, Turkey, 10 - 13 September 2002
- XLIII. **Sedimentlerden İzmetallerin pH ya bağlı ultrasonik liçingi**  
ELİK A.  
XVI. Ulusal Kimya Kongresi, Turkey, 10 - 13 September 2002
- XLIV. **Sivas ta trafik kökenli ağır metal kirliliğinin belirlenmesi**  
ÇINAR T., ELİK A.  
XVI. Kimya Kongresi, Turkey, 03 February 2002
- XLV. **Ultrasonic Leaching Method in the Sequential Extraction of Strontium from Sediments**  
ELİK A., AKÇAY M.  
MBCAC III -3rd Mediterranean Basin Conference on Analytical Chemistry, 01 February 2000
- XLVI. **Irmak sedimentinde stronsiyum iyonu fraksiyonlarının ardışık özütleme tekniğiyle belirlenmesi**  
ELİK A., AKÇAY M.  
13. Kimya Kongresi, Turkey, 07 February 1999
- XLVII. **Çevresel örneklerin ultrasonik leaching ile ağır metal analizine hazırlanması**  
ELİK A., AKÇAY M.  
11. Kimya Kongresi, Turkey, 02 February 1997
- XLVIII. **Sivas ta yaz sezonu çevresel ağır metal kirliliğinin izlenmesi**  
ELİK A., AKÇAY M.  
11. Kimya Kongresi, Turkey, 02 February 1997
- XLIX. **Kaba partikül ve ağır metal yayıcı olarak çimento fabrikalarının dolaylı izlenmesi**  
ELİK A.  
11. Kimya Kongresi, Turkey, 02 February 1997
- L. **Ultrasonik etkili özütleme ile sediment ve filiz örneklerinin analize hazırlanması**  
ELİK A., AKÇAY M., SAVAŞCI Ş.  
7. Kimya ve Kimya Müh. Sempozyumu, Turkey, 10 February 1991
- LI. **Tecer ırmağı sedimentinde adsorbe ve toplam metal özütleme hızı ve verimi üzerine ultrasonik uyarının etkileri**  
AKÇAY M., ELİK A., SAVAŞCI Ş.  
5. Kimya ve Kimya Müh. Sempozyumu, Turkey, 03 February 1988

## Supported Projects

Ulusoy H. İ., Altunay N., Kavak K. Ş., Elik A., Project Supported by Higher Education Institutions, Monitoring Seasonal Changes in Trace Element Levels in Sivas Hot and Cold Çermik Thermal Spring Waters and Submitting the Report to the City Inventory, 2022 - 2024

## Activities in Scientific Journals

Cumhuriyet Science Journal, Editor, 2016 - Continues

CUMHURİYET SCIENCE JOURNAL, Publication Committee Member, 2016 - Continues

CUMHURİYET SCIENCE JOURNAL, Committee Member, 2016 - Continues

## Metrics

Publication: 151

Citation (WoS): 632

Citation (Scopus): 1173

H-Index (WoS): 16

H-Index (Scopus): 21

## Congress and Symposium Activities

2nd International Environmental Chemistry , Working Group, Antalya, Turkey, 2019

VIII. UMTEBINTERNATIONALCONGRESS ONVOCATIONAL TECHNICAL SCIENCES, Working Group, Sivas, Turkey, 2019

3rd INTERNATIONAL CONGRESSOF APPLIED SCIENCES , Working Group, Sivas, Turkey, 2019

International Trace Analysis Congress , Working Group, Sivas, Turkey, 2018

International Conference on Technology, Engineering and Science, Working Group, Antalya, Turkey, 2017

I.International Scientific and Vocational Studies Congress, Working Group, Nevşehir, Turkey, 2017

XXII. Kimya Kongresi , Working Group, Gazimagusa, Cyprus (Kkct), 2008

IV. Ulusal Analitik Kimya Kongresi , Working Group, Elazığ, Turkey, 2008

XVII. Kimya Kongresi, Working Group, İstanbul, Turkey, 2003

XVI. Kimya Kongresi , Working Group, Konya, Turkey, 2002

13. Kimya Kongresi , Working Group, Samsun, Turkey, 1999

11. Kimya Kongresi, Working Group, Van, Turkey, 1997

7. Kimya ve Kimya Müh. Sempozyumu , Working Group, Samsun, Turkey, 1991

5. Kimya ve Kimya Müh. Sempozyumu , Working Group, Van, Turkey, 1988