

Prof. Aslı Baysal

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2005 - 2011

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Turkey 2002 - 2005

Undergraduate, Istanbul University, Turkey 1998 - 2002

Dissertations

Doctorate, İnsan saç örneklerinde eser elementlerin katı örnekleme atomik absorpsiyon Yöntemi ile tayini, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2011

Postgraduate, Slurry tekniği ile eser elementlerin zenginleştirilmesi ve atomik absorpsiyon spektrometrisi ile tayini, Istanbul Technical University, Fen Bilimleri Enstitüsü, 2005

Research Areas

Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Professor, Istanbul Technical University, Fen-Edebiyat, Kimya, 2024 - Continues

Associate Professor, Istanbul Technical University, Fen-Edebiyat, Kimya, 2022 - 2024

Professor, Istanbul Aydın University, Health Services Vocational School, Department Of Medical Services And Techniques, 2020 - 2022

Associate Professor, Istanbul Aydın University, Health Services Vocational School, Department Of Medical Services And Techniques, 2015 - 2020

Assistant Professor, Istanbul Aydın University, Health Services Vocational School, Department Of Medical Services And Techniques, 2013 - 2015

Academic and Administrative Experience

Deputy Director of Research Institute, Istanbul Technical University, 2024 - 2027

Head of Department, Istanbul Aydin University, Health Services Vocational School, Department Of Medical Services And Techniques, 2014 - 2022

Director of The Institution, Istanbul Aydin University, Institute Of Health Sciences, 2016 - 2019

Advising Theses

Baysal A., Onat B., Metro havasındaki partikül maddenin elementel bileşimi ve mikrobiyal toksisitesi, Postgraduate, B.BAYHATUN(Student), 2023

Baysal A., Akman S., Distribution of trace elements in tobacco and shisha products in Turkey and accumulation on their smoke, Postgraduate, G.ŞİRİN(Student), 2017

Baysal A., Özcan M., Polisakkarit kaplı titanyum nanopartiküller kullanılarak bazı ağır metallerin giderilmesi, Postgraduate, C.KUZNEK(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Oxidative stress, biofilm-formation and activity responses of *P. aeruginosa* to microplastic-treated sediments: Effect of temperature and sediment type**
Saygin H., Tilkili B., Kayisoglu P., Baysal A.
ENVIRONMENTAL RESEARCH A JOURNAL OF ENVIRONMENTAL MEDICINE AND THE ENVIRONMENTAL SCIENCES, vol.248, no.248, pp.1-12, 2024 (SCI-Expanded)
- II. **Culture dependent analysis of bacterial activity, biofilm-formation and oxidative stress of seawater with the contamination of microplastics under climate change consideration**
Baysal A.
THE SCIENCE OF THE TOTAL ENVIRONMENT AN INTERNATIONAL JOURNAL FOR SCIENTIFIC RESEARCH INTO THE ENVIRONMENT AND ITS RELATIONSHIP WITH MAN, vol.922, pp.1-16, 2024 (SCI-Expanded)
- III. **Exposure to phagolysosomal simulated fluid altered the cytotoxicity of PET micro(nano)plastics to human lung epithelial cells**
Baysal A., Soyocak A., Saygin H., Saridag A. M.
Toxicology Mechanisms and Methods, vol.34, no.1, pp.72-97, 2024 (SCI-Expanded)
- IV. **A characterization and an exposure risk assessment of microplastics in settled house floor dust in Istanbul, Turkey**
Saygin H., Baysal A., Zora S. T., Tilkili B.
Environmental science and pollution research international, vol.30, no.57, pp.121030-121049, 2023 (SCI-Expanded)
- V. **Oxidative stress and chemical characteristics of indoor PM_{2.5}: a case study in an underground (-3rd) floor**
Saygin H., Baysal A., ONAT B., Zora S. T.
Air Quality, Atmosphere and Health, vol.16, no.7, pp.1345-1356, 2023 (SCI-Expanded)
- VI. **Elemental, Oxidative and Functional Group Characteristics of Sediments in the Industrial Marine area in Tuzla Aydinli Bay, Istanbul, Turkey Between 2016 and 2020**
Baysal A.
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.110, no.85, pp.1-13, 2023 (SCI-Expanded)
- VII. **Sorption of thiamin (vitamin B1) onto micro(nano)plastics: pH dependence and sorption models**
Kılincer M., Saygin H., Özyürek M., Baysal A.
Journal of Environmental Science and Health, Part A, vol.0, no.X, pp.1-11, 2023 (SCI-Expanded)
- VIII. **Multispectroscopic Characterization of Surface Interaction between Antibiotics and Micro(nano)-sized Plastics from Surgical Masks and Plastic Bottles**

Baysal A., Saygin H.

ACS OMEGA, vol.0, no.0, pp.1-13, 2023 (SCI-Expanded)

- IX. **An assessment of ecological and possible human health risks from Cr and Ni in sediments affected by the industrial marine area in Tuzla Aydinli Bay, Istanbul, Turkey between 2016-2020**
Baysal A., Saygin H.
STOCHASTIC ENVIRONMENTAL RESEARCH AND RISK ASSESSMENT, vol.37, no.1, pp.203-217, 2023 (SCI-Expanded)
- X. **Interaction of nanoplastics with simulated biological fluids and their effect on the biofilm formation**
Saygin H., Baysal A.
ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.29, no.53, pp.80775-80786, 2022 (SCI-Expanded)
- XI. **Influence of Ca species on the surface properties of TiO₂ nanoparticles and its possible transformation**
Saygin H., Baysal A.
BULLETIN OF MATERIALS SCIENCE, vol.45, no.3, 2022 (SCI-Expanded)
- XII. **Single and combined effects of antibiotics and nanoplastics from surgical masks and plastic bottles on pathogens**
Saygin H., Baysal A.
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.257, 2022 (SCI-Expanded)
- XIII. **Co-occurrence of antibiotics and micro(nano)plastics: a systematic review between 2016-2021**
Baysal A., Saygin H.
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.57, no.7, pp.519-539, 2022 (SCI-Expanded)
- XIV. **Interaction of amino acids with nanoplastic traces and their effect on Staphylococcus aureus**
Saygin H., Baysal A.
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.56, no.11, pp.1253-1263, 2021 (SCI-Expanded)
- XV. **Insights into the Degradation Behavior of Submicroplastics by Klebsiella pneumoniae**
Saygin H., Baysal A.
JOURNAL OF POLYMERS AND THE ENVIRONMENT, vol.29, no.3, pp.958-966, 2021 (SCI-Expanded)
- XVI. **Microplastic Occurrences in Sediments Collected from Marmara Sea-Istanbul, Turkey**
Baysal A., Saygin H., Ustabasi G. S.
Bulletin of Environmental Contamination and Toxicology, vol.105, no.4, pp.522-529, 2020 (SCI-Expanded)
- XVII. **Degradation of sub mu-sized bioplastics by clinically important bacteria under sediment and seawater conditions: Impact on the bacteria responses**
Saygin H., Baysal A.
JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH PART A-TOXIC/HAZARDOUS SUBSTANCES & ENVIRONMENTAL ENGINEERING, vol.56, no.1, pp.9-20, 2020 (SCI-Expanded)
- XVIII. **Risks of graphene nanomaterial contamination in the soil: evaluation of major ions**
Baysal A., Saygin H., Ustabasi G. S.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.192, no.10, 2020 (SCI-Expanded)
- XIX. **Biofilm Formation of Clinically Important Bacteria on Bio-Based and Conventional Micro/Submicron-Sized Plastics**
Saygin H., Baysal A.
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.105, no.1, pp.18-25, 2020 (SCI-Expanded)
- XX. **Similarities and Discrepancies Between Bio-Based and Conventional Submicron-Sized Plastics: In Relation to Clinically Important Bacteria**
Saygin H., Baysal A.
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.105, no.1, pp.26-35, 2020 (SCI-Expanded)

- XXI. **Age-related physicochemical differences in ZnO nanoparticles in the seawater and their bacterial interaction**
Baysal A., Saygin H., Ustabasi G. S.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.192, no.5, 2020 (SCI-Expanded)
- XXII. **Bacterial interactions of microplastics extracted from toothpaste under controlled conditions and the influence of seawater**
Ustabasi G. S., Baysal A.
SCIENCE OF THE TOTAL ENVIRONMENT, vol.703, 2020 (SCI-Expanded)
- XXIII. **An insight into the dependency on sample preparation for (eco) toxicity assessment of TiO₂ nanoparticles**
Baysal A., Saygin H., Ustabasi G. S.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.192, no.2, 2020 (SCI-Expanded)
- XXIV. **The miniaturised process for lead removal from water samples using novel bioconjugated sorbents**
Morcali M. H., Baysal A.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.99, no.14, pp.1397-1414, 2019 (SCI-Expanded)
- XXV. **Occurrence and risk assessment of microplastics from various toothpastes**
Ustabasi G. S., Baysal A.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.191, no.7, 2019 (SCI-Expanded)
- XXVI. **Influence of Al₂O₃ Nanoparticles on the Soil Elements**
Baysal A., Saygin H., Ustabasi G. S.
BULLETIN OF ENVIRONMENTAL CONTAMINATION AND TOXICOLOGY, vol.102, no.1, pp.98-104, 2019 (SCI-Expanded)
- XXVII. **The miniaturised solid phase extraction of some trace metals using graphene nanoplatelets by GFAAS**
Özbek N., Baysal A.
International Journal of Environmental Analytical Chemistry, vol.98, no.7, pp.685-694, 2018 (SCI-Expanded)
- XXVIII. **Assessment of chromium and nickel levels in surface sea waters and sediments from industrial marine area in Tuzla Aydinli Bay, Istanbul Turkey**
Baysal A., Akman S.
Marine Pollution Bulletin, vol.130, pp.293-298, 2018 (SCI-Expanded)
- XXIX. **Starch coated titanium dioxide nanoparticles as a challenging sorbent to separate and preconcentrate some heavy metals using graphite furnace atomic absorption spectrometry**
Baysal A., Kuznek C., Özcan M.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.98, no.1, pp.45-55, 2018 (SCI-Expanded)
- XXX. **Effect of zinc oxide nanoparticles on the trace element contents of soils**
Baysal A., Saygin H.
CHEMISTRY AND ECOLOGY, vol.34, no.8, pp.713-726, 2018 (SCI-Expanded)
- XXXI. **Influence of environmental media on carbon nanotubes and graphene nanoplatelets towards bacterial toxicity**
Baysal A., Saygin H., Ustabasi G. S.
Archives of Environmental Protection, vol.44, no.3, pp.85-98, 2018 (SCI-Expanded)
- XXXII. **Interaction of PM_{2.5} airborne particulates with ZnO and TiO₂ nanoparticles and their effect on bacteria**
Baysal A., Saygin H., Ustabasi G. S.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.190, no.1, 2018 (SCI-Expanded)
- XXXIII. **Starch coated titanium dioxide nanoparticles as a challenging sorbent to separate and preconcentrate some heavy metals using graphite furnace atomic absorption spectrometry**
BAYSAL A., Kuznek C., Özcan M.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, vol.98, no.1, pp.45-55, 2018 (SCI-

Expanded)

- XXXIV. **Chemical characterization of surface snow in Istanbul (NW Turkey) and their association with atmospheric circulations**
Baysal A., Baltacı H., Özbek N., Destanoglu O., Ustabasi G. S., Gumus G.
Environmental Monitoring and Assessment, vol.189, no.6, 2017 (SCI-Expanded)
- XXXV. **Determination of sulfur in human hair using high resolution continuum source graphite furnace molecular absorption spectrometry and its correlation with total protein and albumin**
Ozbek N., Baysal A.
Spectrochimica Acta - Part B Atomic Spectroscopy, vol.130, pp.17-20, 2017 (SCI-Expanded)
- XXXVI. **Determination of sulfur by high-resolution continuum source atomic absorption spectrometry: Review of studies over the last 10 years**
Ozbek N., Baysal A.
TrAC - Trends in Analytical Chemistry, vol.88, pp.62-76, 2017 (SCI-Expanded)
- XXXVII. **Determination of Mercury in Istanbul Airborne Particles Using Solid Sampling High-Resolution Continuum Source Graphite Furnace Atomic Absorption Spectrometry**
Baysal A., Akman S.
Analytical Letters, vol.49, no.12, pp.1896-1902, 2016 (SCI-Expanded)
- XXXVIII. **Investigation of fluorine content in PM_{2.5} airborne particles of Istanbul, Turkey**
Ozbek N., Baltacı H., Baysal A.
Environmental Science and Pollution Research, vol.23, no.13, pp.13169-13177, 2016 (SCI-Expanded)
- XXXIX. **A new approach for the determination of sulphur in airborne particles by HR-CS ETAAS**
Ozbek N., Baysal A.
International Journal of Environmental Analytical Chemistry, vol.96, no.6, pp.505-514, 2016 (SCI-Expanded)
- XL. **Lead and cadmium sorption in water samples using modified nano-sized cobalt aluminate**
Morcali M. H., Baysal A.
DESALINATION AND WATER TREATMENT, vol.57, no.46, pp.21855-21862, 2016 (SCI-Expanded)
- XLI. **A new approach for the determination of sulphur in food samples by high-resolution continuum source flame atomic absorption spectrometer**
Ozbek N., Baysal A.
Food Chemistry, vol.168, pp.460-463, 2015 (SCI-Expanded)
- XLII. **Influence of surface properties of zinc oxide nanoparticles on their cytotoxicity**
Altunbek M., Baysal A., Culha M.
COLLOIDS AND SURFACES B-BIOINTERFACES, vol.121, pp.106-113, 2014 (SCI-Expanded)
- XLIII. **Chemical characterization of PM_{2.5} fractions of urban aerosol collected in Budapest and Istanbul**
Szigeti T., Mihucz V. G., Ovari M., BAYSAL A., ATILGAN S., Akman S., Zaray G.
Microchemical Journal, vol.107, pp.86-94, 2013 (SCI-Expanded)
- XLIV. **Monitoring of Pd in airborne particulates by solid sampling high-resolution continuum source electrothermal atomic absorption spectrometry**
ATILGAN S., Akman S., BAYSAL A., Bakircioglu Y., Szigeti T., Ovari M., Zaray G.
Spectrochimica Acta - Part B Atomic Spectroscopy, vol.70, pp.33-38, 2012 (SCI-Expanded)
- XLV. **Slurry sampling electrothermal atomic absorption spectrometric determination of chromium after separation/enrichment by mercaptoundecanoic acid modified gold coated TiO₂ nanoparticles**
BAYSAL A., Akman S., DEMIR S., Kahraman M.
Microchemical Journal, vol.99, no.2, pp.421-424, 2011 (SCI-Expanded)
- XLVI. **A practical method for the determination of sulphur in coal samples by high-resolution continuum source flame atomic absorption spectrometry**
Baysal A., Akman S.
Talanta, vol.85, no.5, pp.2662-2665, 2011 (SCI-Expanded)
- XLVII. **Determination of some trace elements by flame atomic absorption spectrometry after preconcentration and separation by Escherichia coli immobilized on multiwalled carbon nanotubes**
AYDEMİR N., Tokman N., AKARSUBASI A. T., BAYSAL A., Akman S.

- Microchimica Acta, vol.175, no.1-2, pp.185-191, 2011 (SCI-Expanded)
- XLVIII. **A rapid solid sampling method for determination of nickel and copper along human hair by ETAAS**
BAYSAL A., Akman S.
Microchemical Journal, vol.98, no.2, pp.291-296, 2011 (SCI-Expanded)
- XLIX. **Comparison of digestion and solid sampling techniques for the determination of Pb and Cu in blackpepper**
BAYSAL A., Akman S.
International Journal of Food Science and Technology, vol.46, no.7, pp.1515-1521, 2011 (SCI-Expanded)
- L. **A rapid method for the determination of Pb, Cu and Sn in dried tomato sauces with solid sampling electrothermal atomic absorption spectrometry**
Baysal A., Özcan M., AKMAN S.
Food and Chemical Toxicology, vol.49, no.6, pp.1399-1403, 2011 (SCI-Expanded)
- LI. **FAAS slurry analysis of lead and copper ions preconcentrated on titanium dioxide nanoparticles coated with a silver shell and modified with cysteamine**
Baysal A., Saatci A. D., Kahraman M., Akman S.
Microchimica Acta, vol.173, no.3-4, pp.495-502, 2011 (SCI-Expanded)
- LII. **In vivo evolutionary engineering of a boron-resistant bacterium: Bacillus boroniphilus**
SEN M., YILMAZ U., BAYSAL A., Akman S., Çakar Z. P.
Antonie van Leeuwenhoek, International Journal of General and Molecular Microbiology, vol.99, no.4, pp.825-835, 2011 (SCI-Expanded)
- LIIL. **The use of gold nanoparticles as an effective modifier for the determination of arsenic and antimony by electrothermal atomic absorption spectrometry**
GUNDUZ S., Akman S., BAYSAL A., Culha M.
Microchimica Acta, vol.172, no.3-4, pp.403-407, 2011 (SCI-Expanded)
- LIV. **A practical solid sampling method for the determination of lead in chewing gum by electrothermal atomic absorption spectrometry**
Baysal A., Ozbek N., Akman S.
Food Chemistry, vol.123, no.3, pp.901-904, 2010 (SCI-Expanded)
- LV. **Interaction of multi-functional silver nanoparticles with living cells**
Sur I., Cam D., Kahraman M., Baysal A., ÇULHA M.
Nanotechnology, vol.21, no.17, 2010 (SCI-Expanded)
- LVI. **The use of silver nanoparticles as an effective modifier for the determination of arsenic and antimony by electrothermal atomic absorption spectrometry**
Gunduz S., Akman S., Baysal A., Kahraman M.
Spectrochimica Acta - Part B Atomic Spectroscopy, vol.65, no.4, pp.297-300, 2010 (SCI-Expanded)
- LVII. **Determination of lead in hair and its segmental analysis by solid sampling electrothermal atomic absorption spectrometry**
BAYSAL A., Akman S.
Spectrochimica Acta - Part B Atomic Spectroscopy, vol.65, no.4, pp.340-344, 2010 (SCI-Expanded)
- LVIII. **Solid-phase extraction of Mn(II) and slurry analysis of the sorbent by electrothermal atomic absorption spectrometry**
BAYSAL A., Akman S.
Environmental Monitoring and Assessment, vol.160, no.1-4, pp.199-206, 2010 (SCI-Expanded)
- LIX. **The solid phase extraction of lead using silver nanoparticles - Attached to Silica gel prior to its determination by FAAS**
BAYSAL A., Kahraman M., Akman S.
Current Analytical Chemistry, vol.5, no.4, pp.352-357, 2009 (SCI-Expanded)
- LX. **A novel slurry sampling analysis of lead in different water samples by electrothermal atomic absorption spectrometry after coprecipitated with cobalt/pyrrolidine dithiocarbamate complex**
Baysal A., Akman S., Çalışır F.
JOURNAL OF HAZARDOUS MATERIALS, vol.158, no.2-3, pp.454-459, 2008 (SCI-Expanded)

- LXI. **Slurry analysis after lead collection on a sorbent and its determination by electrothermal atomic absorption spectrometry**
Baysal A., Tokman N., Akman S., OZEROGLU C.
Journal of Hazardous Materials, vol.150, no.3, pp.804-808, 2008 (SCI-Expanded)
- LXII. **The use of solid-phase extraction and direct injection of a copolymer sorbent as slurry into the graphite furnace prior to determination of cadmium by ETAAS**
BAYSAL A., Tokman N., Akman S.
International Journal of Environmental Analytical Chemistry, vol.88, no.2, pp.141-150, 2008 (SCI-Expanded)

Articles Published in Other Journals

- I. **Impact of test conditions on the bacterial bioassay in the presence of tio₂ nanoparticles**
Baysal A., Saygin H., Ustabasi G. S.
Journal of Chemical Metrology, vol.14, no.2, pp.114-124, 2020 (ESCI)
- II. **Importance of sample pretreatment on the bacterial bioassay for toxicity of zno nanoparticles**
Baysal A., Saygin H., Ustabasi G. S.
Journal of Chemical Metrology, vol.14, no.1, pp.12-24, 2020 (ESCI)
- III. **Physico-chemical and toxicological behaviour of Al₂O₃ nanoparticles in fine particulate matter**
Baysal A., Saygin H.
Environmental Engineering and Management Journal, vol.18, no.12, pp.2683-2694, 2019 (Scopus)
- IV. **Adsorption of copper and zinc from sulfate media on a commercial sorbent**
MORCALI M. H., ZEYTUNCU B., BAYSAL A., AKMAN S., YÜCEL O.
Journal of Environmental Chemical Engineering, vol.2, no.3, pp.1655-1662, 2014 (ESCI)
- V. **Optical studies of semiconductor Quantum Dots**
Yükselici H., Allahverdi C., Aşikoğlu A., Ünlü H., Baysal A., Çulha M., Ince R., Ince A., Feeney M., Athalin H.
NanoScience and Technology, vol.77, pp.101-117, 2013 (Scopus)

Books & Book Chapters

- I. **Smart nanosensors and methods for detection of nanoparticles and their potential toxicity in air**
Baysal A., Saygin H.
in: Nanomaterials for air remediation, Amrane Abdeltif, Aymen Amine Assadi, Phuong Nguyen-Tri, Tuan Anh Nguyen, Sami Rtimi, Editor, Elsevier Science, Oxford/Amsterdam, New York, pp.33-59, 2020
- II. **Interactions of nanomaterials with the soil**
BAYSAL A., SAYGIN H.
in: Nanomaterials for Soil Remediation, Amrane Abdeltif, Mohan Dinesh, Nguyen Tuan Anh, Asadi Aymen Amine, Yasin Ghulam, Editor, Elsevier, pp.13-32, 2020
- III. **Nanomaterials-based absorbents**
BAYSAL A., SAYGIN H.
in: Nanomaterials for Soil Remediation, Amrane Abdeltif, Mohan Dinesh, Nguyen Tuan Anh, Asadi Aymen Amine, Yasin Ghulam, Editor, Elsevier, pp.371-384, 2020
- IV. **Solid-Phase Extraction**
Özbek N., Baysal A., Akman S., Doğan M.
in: Analytical Separation Science, Jared Anderson, Alain Berthod, Veronica Pino, Apryll M. Stalcup, Editor, Wiley-VCH Verlag Weinheim GmbH, Weimar, pp.1571-1594, 2016
- V. **Spectrochemical Methods Of Analysis**
Barbooti M. M., Baysal A., Alderzi N.
in: Environmental Applications of Instrumental Chemical Analysis, Mahmood Barbooti, Editor, Taylor Publishing Company, London, pp.1-54, 2015

- VI. **Environmental Sampling And Sample Preparation**
Baysal A., Ozcan M.
in: Environmental Applications of Instrumental Chemical Analysis, Mahmood Barbooti, Editor, Taylor eBookstore , London, pp.1-24, 2015
- VII. **Heavy Metal Determination in Environmental Samples**
Özbek N., Baysal A., Akman S.
in: Environmental Applications of Instrumental Chemical Analysis, Barbooti, Mahmood, Editor, Apple Academic Press, Waretown, pp.441-470, 2015
- VIII. **Determination of Trace Metals in Waste Water and Their Removal Processes**
BAYSAL A., ÖZBEK N., AKMAN S.
in: Waste Water, Einschlag, Fernando Sebastian García Carlos, Luciana, Editor, INTECH Europe, Rijeka, pp.145-172, 2013
- IX. **Optical Studies of Semiconductor Quantum Dots**
Baysal A.
in: Low Dimensional Semiconductor Structures, Hilmi Ünlü, Norman J. M. Horing, Editor, Springer, London/Berlin , Heidelberg, pp.101-117, 2012

Refereed Congress / Symposium Publications in Proceedings

- I. **SORPTION OF VITAMIN C ONTO MICROPLASTICS**
KILINÇER M., SAYGIN H., ÖZYÜREK M., BAYSAL A.
12th Aegean Analytical Chemistry Days, Turkey, 19 - 22 October 2023
- II. **MODIFICATION HYDROXYAPATITE FROM CATTLE BONES WITH BIOPOLYMERS TO REMOVE HEAVY METAL FROM ENVIRONMENTAL SAMPLES AND LIMIT THE BIOFILM FORMATION**
meltem g., BAYSAL A., SAYGIN H.
12th Aegean Analytical Chemistry Days, Turkey, 19 - 22 October 2023
- III. **IMPACT OF THE IN VITRO HUMAN DIGESTIVE ENVIRONMENT ON THE INTERACTION BETWEEN VITAMIN C AND MICROPLASTICS**
KILINÇER M., SAYGIN H., ÖZYÜREK M., BAYSAL A.
12th Aegean Analytical Chemistry Days, Turkey, 19 - 22 October 2023
- IV. **SYNTHETIC HYDROXYAPATITE COATED WITH METAL ORGANIC FRAMEWORK FOR REMOVAL OF HEAVY METAL IONS FROM ENVIRONMENTAL SOLUTIONS**
meltem g., BAYSAL A., GAZİ M.
12th Aegean Analytical Chemistry Days, Turkey, 19 October 2023
- V. **Impact of Soluble and Exchangeable Concentrations of Elements in Surface Sediments from Recreational Areas on Culturable Bacterial Behaviors**
SAYGIN H., BAYSAL A.
12th Aegean Analytical Chemistry Days, Turkey, 19 - 22 October 2023
- VI. **Determination of Soluble and Geochemically Reactive Concentrations of Metals in Surface Sediments from Lakes in Marmara Region-Turkey, and Their Risk Assessment**
SAYGIN H., BAYSAL A.
12th Aegean Analytical Chemistry Days, Turkey, 19 - 22 October 2023
- VII. **Characterizing Inhalable Major Elemental Components of PM2.5 In Istanbul (Turkey) And Their Impact on Pathogens: A Case Study During COVID-19 Consecutive Lockdown and Unlockdown Days**
BAYSAL A., SAYGIN H., Zora Tarakçı S., ONAT B.
10th International Hybrid Symposium on Atmospheric Sciences, İstanbul, Turkey, 18 - 21 October 2022
- VIII. **Investigation of Outdoor PM2.5 Oxidative Characteristics and Impact on Activity and Biofilm Production of Bacteria**
BAYSAL A., SAYGIN H., Zora Tarakçı S., ONAT B.
10th International Hybrid Symposium on Atmospheric Sciences, İstanbul, Turkey, 18 - 21 October 2022

- IX. Seasonal Distribution of Outdoor Microbial Activity of Istanbul-Turkey**
Baysal A., Ustabasi G. S., Özbek N.
9th INTERNATIONAL SYMPOSIUM ON ATMOSPHERIC SCIENCES(ATMOS 2019), İstanbul, Turkey, 23 - 26 October 2019
- X. Determining the impact of aging on the bacterial toxicity of Zn nanoparticle**
BAYSAL A., SAYGIN H., ustabaşı g. ş.
2nd International Conference on Nanomaterials Science and Mechanical Engineering, Aveiro, Portugal, 9 - 12 July 2019
- XI. Trace element concentrations in soil and their accumulation on tree and fruit**
Baysal A., Özbek N., Ozcan N.
1st International Balkan Chemistry Congress (IBCC 2018), Edirne, Turkey, 17 - 20 September 2018
- XII. Microbial Load of Aerosols During Dental Practice in Paediatric Dentistry Clinic**
KARATABAN P. K., ÖNER ÖZDAŞ D., BAYSAL A., ZORLU S.
24th IADH International Congress, Dubai, United Arab Emirates, 31 August - 02 September 2018, vol.19
- XIII. The Solid Phase Extraction of Some Trace Metals Using Graphene Nanoplatelets by HR-CS AAS**
Özbek N., Baysal A.
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- XIV. A novel approach for the determination of fluorine and sulphur in airborne particles by HR CSAAS**
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