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Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya A.B.D., Turkey 2013 - 2020

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya A.B.D., Turkey 2011 - 2013

Undergraduate, Tokat Gaziosmanpaşa University, Faculty Of Arts And Sciences, Turkey 2006 - 2010

Dissertations

Doctorate, YÜZEY PLAZMON REZONANS (SPR) TEMELLİ AFLATOKSİN SENSÖRLERİN HAZIRLANMASI, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya A.B.D., 2020

Postgraduate, L-FenilalaninIn Tanınmasına Yönelik Afinite Kartuşlarının Hazırlanması, Hacettepe University, Fen Bilimleri Enstitüsü, Kimya A.B.D., 2013

Research Areas

Chemistry

Academic Titles / Tasks

Lecturer PhD, Hacettepe University, Fen Fakültesi, Kimya Bölümü, 2019 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- Specific DNA aptamer-immobilized cryogel membranes as novel bioaffinity supports and their potential for the purification of activated protein C**
Aliyeva N., AKGÖNÜLLÜ S., ERDEM GÜRSAN K. A., DENİZLİ A.
BIOMEDICAL CHROMATOGRAPHY, 2024 (SCI-Expanded)
- Surface Plasmon Resonance Biosensors for Detection of Allergen-Specific Immunoglobulin E**
Erkek M., AKGÖNÜLLÜ S., DENİZLİ A., BERELİ N.
IEEE SENSORS JOURNAL, no.11, pp.17410-17417, 2024 (SCI-Expanded)
- Plasmonic nanosensors for pharmaceutical and biomedical analysis**

- AKGÖNÜLLÜ S., DENİZLİ A.
Journal of Pharmaceutical and Biomedical Analysis, vol.236, 2023 (SCI-Expanded)
- IV. **Molecular imprinting-based sensors: Lab-on-chip integration and biomedical applications**
AKGÖNÜLLÜ S., DENİZLİ A.
Journal of Pharmaceutical and Biomedical Analysis, vol.225, 2023 (SCI-Expanded)
- V. **Molecularly Imprinted Polymer-Based Sensors for Protein Detection**
Akgönüllü S., Kılıç S., Esen C., Denizli A.
POLYMERS, vol.15, no.3, pp.629, 2023 (SCI-Expanded)
- VI. **Cibacron Blue F3GA ligand dye-based magnetic silica particles for the albumin purification**
Tatar N., AKGÖNÜLLÜ S., Yavuz H., DENİZLİ A.
Turkish Journal of Chemistry, vol.47, no.5, pp.1125-1137, 2023 (SCI-Expanded)
- VII. **Ion-imprinted-based nanochelators for iron(III) removal from synthetic gastric fluid**
Sangu H. D., AKGÖNÜLLÜ S., DENİZLİ A.
POLYMER BULLETIN, vol.79, no.10, pp.8947-8965, 2022 (SCI-Expanded)
- VIII. **Quartz Crystal Microbalance-Based Aptasensors for Medical Diagnosis**
AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.
MICROMACHINES, vol.13, no.9, 2022 (SCI-Expanded)
- IX. **Molecularly imprinted polymer film based plasmonic sensors for detection of ochratoxin A in dried fig**
AKGÖNÜLLÜ S., ARMUTCU ÇORMAN C., DENİZLİ A.
POLYMER BULLETIN, vol.79, no.6, pp.4049-4067, 2022 (SCI-Expanded)
- X. **Preparation of magnetic nanoparticles-assisted plasmonic biosensors with metal affinity for interferon-alpha detection**
Saylan Y., AKGÖNÜLLÜ S., DENİZLİ A.
MATERIALS SCIENCE AND ENGINEERING B-ADVANCED FUNCTIONAL SOLID-STATE MATERIALS, vol.280, 2022 (SCI-Expanded)
- XI. **Effect of donkey milk lactoferrin and lysozyme on yoghurt properties**
AKAL DEMİRDÖĞEN H. C., Ozturkoglu-Budak S., BERELİ N., ÇİMEN D., AKGÖNÜLLÜ S.
MLJEKARSTVO, vol.72, no.2, pp.77-87, 2022 (SCI-Expanded)
- XII. **Development of ion imprinted based magnetic nanoparticles for selective removal of arsenic (III) and arsenic (V) from wastewater**
TÜRKMEN D., Turkmen M. O., AKGÖNÜLLÜ S., DENİZLİ A.
SEPARATION SCIENCE AND TECHNOLOGY, vol.57, no.6, pp.990-999, 2022 (SCI-Expanded)
- XIII. **Recent Advances in Quartz Crystal Microbalance Biosensors Based on the Molecular Imprinting Technique for Disease-Related Biomarkers**
AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.
CHEMOSENSORS, vol.10, no.3, 2022 (SCI-Expanded)
- XIV. **Development of Gold Nanoparticles Decorated Molecularly Imprinted-Based Plasmonic Sensor for the Detection of Aflatoxin M1 in Milk Samples**
Akgönüllü S., Yavuz Alagoz H., Denizli A.
CHEMOSENSORS, vol.9, no.12, pp.363-393, 2021 (SCI-Expanded)
- XV. **Microfluidic Systems for Cancer Diagnosis and Applications**
Akgönüllü S., Bakhshpour M., Özden A. K., Denizli A.
Micromachines, vol.12, no.11, pp.1349, 2021 (SCI-Expanded)
- XVI. **Use of antimicrobial proteins of donkey milk as preservative agents in Kashar cheese production**
Ozturkoglu-Budak S., Akal H. C., BERELİ N., ÇİMEN D., AKGÖNÜLLÜ S.
International Dairy Journal, vol.120, 2021 (SCI-Expanded)
- XVII. **Plasmonic Sensors for Monitoring Biological and Chemical Threat Agents**
Saylan Y., Akgönüllü S., Denizli A.
BIOSENSORS-BASEL, vol.10, no.10, pp.1-15, 2020 (SCI-Expanded)
- XVIII. **SPR nanosensor based on molecularly imprinted polymer film with gold nanoparticles for sensitive**

detection of aflatoxin B1

Akgönüllü S., Yavuz Alagöz H., Denizli A.

TALANTA, vol.219, pp.1-8, 2020 (SCI-Expanded)

- XIX. **Biomimetic Nanoparticles Based Surface Plasmon Resonance Biosensors for Histamine Detection in Foods**
Rahtuvanoglu A., AKGÖNÜLLÜ S., Karacan S., DENİZLİ A.
CHEMISTRYSELECT, vol.5, no.19, pp.5683-5692, 2020 (SCI-Expanded)
- XX. **Rapid and sensitive detection of synthetic cannabinoids JWH-018, JWH-073 and their metabolites using molecularly imprinted polymer-coated QCM nanosensor in artificial saliva**
AKGÖNÜLLÜ S., Battal D., Yalcin M. S., Yavuz H., DENİZLİ A.
Microchemical Journal, vol.153, 2020 (SCI-Expanded)
- XXI. **Molecularly imprinted based surface plasmon resonance nanosensors for microalbumin detection**
Esenturk M. K., AKGÖNÜLLÜ S., Yilmaz F., DENİZLİ A.
JOURNAL OF BIOMATERIALS SCIENCE-POLYMER EDITION, vol.30, no.8, pp.646-661, 2019 (SCI-Expanded)
- XXII. **Molecularly Imprinted Polymer Based Sensors for Medical Applications**
SAYLAN Y., Akgonullu S., Yavuz H., ÜNAL S., DENİZLİ A.
SENSORS, vol.19, no.6, 2019 (SCI-Expanded)
- XXIII. **Surface plasmon resonance aptasensor for detection of human activated protein C**
Koyun S., AKGÖNÜLLÜ S., Yavuz H., Erdem A., DENİZLİ A.
TALANTA, vol.194, pp.528-533, 2019 (SCI-Expanded)
- XXIV. **Molecularly imprinted polymer based quartz crystal microbalance sensor system for sensitive and label-free detection of synthetic cannabinoids in urine**
Battal D., AKGÖNÜLLÜ S., Yalcin M. S., Yavuz H., Denizli A.
BIOSENSORS & BIOELECTRONICS, vol.111, pp.10-17, 2018 (SCI-Expanded)
- XXV. **Preparation of imprinted cryogel cartridge for chiral separation of l-phenylalanine**
AKGÖNÜLLÜ S., Yavuz H., DENİZLİ A.
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.45, no.4, pp.800-807, 2017 (SCI-Expanded)
- XXVI. **Development of surface plasmon resonance sensors based on molecularly imprinted nanofilms for sensitive and selective detection of pesticides**
SAYLAN Y., AKGONULLU S., ÇİMEN D., DERAZSHAMSHIR A., BERELİ N., Yilmaz F., DENİZLİ A.
SENSORS AND ACTUATORS B-CHEMICAL, vol.241, pp.446-454, 2017 (SCI-Expanded)

Articles Published in Other Journals

- I. **Recent advances in optical biosensing approaches for biomarkers detection**
AKGÖNÜLLÜ S., DENİZLİ A.
Biosensors and Bioelectronics: X, vol.12, 2022 (Scopus)
- II. **Heavy Metal Ions Removal From Wastewater Using Cryogels: A Review**
TÜRKMEN D., YÜCEL M., AKGÖNÜLLÜ S., AŞIR S., DENİZLİ A.
Frontiers in Sustainability, vol.3, 2022 (Scopus)
- III. **Synthesis of molecularly imprinted magnetic nanoparticles for selective cytidine adsorption**
Ongun E., Akgönüllü S., Yavuz H., Denizli A.
SEPARATION SCIENCE PLUS, vol.4, no.3, pp.147-156, 2021 (ESCI)
- IV. **Molecular Imprinting Technology for Biomimetic Assemblies**
BERELİ N., AKGÖNÜLLÜ S., ASLIYÜCE ÇOBAN S., ÇİMEN D., GÖKTÜRK BAŞAL I., TÜRKMEN D., YAVUZ ALAGÖZ H., DENİZLİ A.
Hacettepe Journal of Biology and Chemistry, vol.48, no.5, pp.575-601, 2020 (Peer-Reviewed Journal)
- V. **Versatile polymeric cryogels and their biomedical applications** Yazarlar
AKGÖNÜLLÜ S., Bakhshpour M., İDİL N., ANDAÇ A. M., YAVUZ ALAGÖZ H., DENİZLİ A.
Hacettepe Journal of Biology and Chemistry, vol.48, no.2, pp.99-118, 2020 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Plasmonic nanosensors for chemical warfare agents**
AKGÖNÜLLÜ S., ÇALIŞIR M., Özbek M. A., Erkek M., BERELİ N., DENİZLİ A.
in: Sensing of Deadly Toxic Chemical Warfare Agents, Nerve Agent Simulants, and their Toxicological Aspects, Sangita Das, Partha Pratim Das, Sabu Thomas, Editor, Elsevier, pp.81-96, 2023
- II. **Nanosensors for medical diagnosis**
Saylan Y., Akgönüllü S., Denizli A.
in: Nanotechnology for Hematology, Blood Transfusion, and Artificial Blood, Adil Denizli, Tuan Anh Nguyen, Mariappan Rajan, Mohammad Feroz Alam, Khaliqur Rahman, Editor, Elsevier Science, Oxford/Amsterdam, Amsterdam, pp.195-213, 2022
- III. **Mass-sensitive based biosensors**
ÖZGÜR E., SAYLAN İNCİ Y., AKGÖNÜLLÜ S., DENİZLİ A.
in: Biosensors: Fundamentals, Emerging Technologies, and Applications, , Editor, CRC Press, pp.89-104, 2022
- IV. **Scaling up of biosensors for clinical applications and commercialization**
SAYLAN İNCİ Y., AKGÖNÜLLÜ S., BERELİ N., YAVUZ ALAGÖZ H., DENİZLİ A.
in: Advanced Biosensors for Virus Detection Smart Diagnostics to Combat SARS-CoV-2, , Editor, Academic Press, pp.407-421, 2022
- V. **Nanosensors for smartphone-enabled sensing devices**
SAYLAN İNCİ Y., AKGÖNÜLLÜ S., ÖZGÜR E., DENİZLİ A.
in: Nanotechnology-Based Smart Remote Sensing Networks for Disaster Prevention, , Editor, Elsevier, pp.85-1104, 2022
- VI. **Nano-sensors and nano-devices for biological disaster monitoring (virus/disease epidemics/animal plagues detections)**
AKGÖNÜLLÜ S., DENİZLİ A.
in: Nanotechnology-Based Smart Remote Sensing Networks for Disaster Prevention, , Editor, Elsevier, pp.43-57, 2022
- VII. **Virus-Based Nanocarriers for Targeted Drug Delivery**
AKGÖNÜLLÜ S., Bakhshpour M., SAYLAN Y., DENİZLİ A.
in: Viral and Antiviral Nanomaterials Synthesis, Properties, Characterization, and Application, Devarajan Thangadurai, Saher Islam, Charles Oluwaseun Adetunji, Editor, CRC Press, Boca Raton, pp.173-191, 2022
- VIII. **Imprinted polymers in biosensors**
SAYLAN İNCİ Y., AKGÖNÜLLÜ S., BERELİ N., DENİZLİ A.
in: Biosensors: Fundamentals, Emerging Technologies, and Applications, , Editor, CRC Press, pp.123-133, 2022
- IX. **Plasmonic Nanoparticles for Naked-Eye Detection of Environmental Pollutants**
AKGÖNÜLLÜ S., YÜCEL M., BERELİ N., DENİZLİ A.
in: Nanobiosensors for Environmental Monitoring, , Editor, Springer, pp.279-297, 2022
- X. **Preparation of Surface Plasmon Resonance Aptasensor for Human Activated Protein C Sensing**
Akgönüllü S., Koyun S., Yavuz Alagöz H., Erdem Gürsan K. A., Denizli A.
in: Biomedical Engineering Technologies. Methods in Molecular Biology, Ossandon M.R. Baker H., Rasooly A., Editor, Springer Nature, New York, pp.37-56, 2021
- XI. **Plasmonic Sensors for Detection of Chemical and Biological Warfare Agents**
Akgönüllü S., Saylan Y., Bereli N., Türkmen D., Yavuz Alagöz H., Denizli A.
in: Plasmonic Sensors and their Applications, Prof. Dr. Adil Denizli, Editor, John Wiley & Sons, New York, pp.71-85, 2021
- XII. **Molecularly Imprinted Based Sensors for Detection of Allergens**
Akgönüllü S., Yavuz Alagöz H., Denizli A.
in: Molecular Imprinting for Nanosensors and Other Sensing Applications, Prof. Dr. Adil DENİZLİ, Editor, Elsevier Science, Oxford/Amsterdam, Amsterdam, pp.309-334, 2021
- XIII. **Commercial biosensors for pathogens**
Akgönüllü S., Çimen D., Bakhshpour M., Bereli N., Yavuz Alagöz H., Denizli A.

in: Commercial Biosensors and Their Applications, Mustafa Kemal Sezgintürk, Editor, Elsevier Science, Oxford/Amsterdam , Amsterdam, pp.89-106, 2020

XIV. Molecularly Imprinted Sensors for Detecting Controlled Release of Pesticides.

Yılmaz F., Bereli N., Derazshamshir A., Çimen D., Akgönüllü S., Saylan Y., Topçu A. A., Denizli A.

in: Controlled Release of Pesticides for Sustainable Agriculture, Rakhimol K. R., Sabu Thomas, Tatiana Volova Jayachandran K, Editor, Springer, London/Berlin , Zürich, pp.207-235, 2019

XV. SENSORS APPLICATIONS OF METAL NANOPARTICLES

AKGÖNÜLLÜ S., YAVUZ ALAGÖZ H., DENİZLİ A.

in: PARTICULATE TECHNOLOGY AND APPLICATIONS, TUNCEL A., YAVUZ H., Editor, PALME DİZGİ GRAFİK BİRİMİ, Ankara, pp.205-215, 2019

XVI. SURFACE PLASMON RESONANCE BASED SENSORS FOR ALLERGENS DETECTION

AKGÖNÜLLÜ S., YAVUZ ALAGÖZ H., DENİZLİ A.

in: AFFINITY SENSORS, DENİZLİ A., Editor, PALME DİZGİ GRAFİK BİRİMİ, Ankara, pp.151-162, 2019

XVII. MASS TRANSFER IN CRYOGELS

BATTAL D., AKGÖNÜLLÜ S., ÇİMEN D., SAYLAN Y., ASLIYÜCE ÇOBAN S., DENİZLİ A.

in: CRYOGELS AND MONOLITHS, MATTIASSON B., DENİZLİ A., Editor, PALME DİZGİ-GRAFİK BİRİMİ, Ankara, pp.181-188, 2019

XVIII. Bacterial cellulose nanofibers for efficient removal of Hg²⁺ from aqueous solutions

Irmak E. T., Türkmen D., Akgönüllü S., Qureshii T., Denizli A.

in: Nanotechnology for Sustainable Water Resources, Ajay Kumar Mishra, Chaudhery Mustansar Hussain, Editor, John Wiley & Sons, West Sussex, UK , New-Jersey, pp.501-522, 2018

XIX. Surface plasmon resonance based nanosensors for detection of triazinic pesticides in agricultural foods

YILMAZ F., SAYLAN Y., AKGÖNÜLLÜ S., ÇİMEN D., DERAZSHAMSHİR A., BERELİ N., DENİZLİ A.

in: New Pesticides and Soil Sensors, Alexandru Mihai Grumezescu, Editor, Academic Press, pp.679-718, 2017

Refereed Congress / Symposium Publications in Proceedings

I. DETECTION OF AFLATOXIN B1 USING AV MOLECULARLY IMPRINTED POLYMER-COATED OPTIC SENSOR

AKGÖNÜLLÜ S., YAVUZ ALAGÖZ H., DENİZLİ A.

8th Graduate Student Symposium on Molecular Imprinting, 28 - 30 August 2019

Tasks In Event Organizations

Akgönüllü S., 20. Kromatografi Kongresi, Scientific Congress, Ankara, Turkey, Şubat 2022

Metrics

Publication: 51

Citation (WoS): 353

Citation (Scopus): 672

H-Index (WoS): 9

H-Index (Scopus): 12