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Personal Information

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Publons / Web Of Science ResearcherID: AAZ-7153-2020

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Education Information

Doctorate, Yıldız Technical University, Fen Edebiyat Fakültesi, Kimya, Turkey 1990 - 1996

Postgraduate, Yıldız Üniversitesi, Fen Edebiyat Fakültesi, Kimya, Turkey 1988 - 1990

Undergraduate, İstanbul University, Kimya Fakültesi, Kimya Mühendisliği, Turkey 1980 - 1985

Dissertations

Doctorate, Bazı antihipertansif ilaçların spektrofotometrik ve sıvı kromatografik analizi, Yıldız Teknik Üniversitesi, Fen Edebiyat Fakültesi, Kimya Bölümü, 1996

Postgraduate, Alüminyum ve krom(III) iyonları karışımının kinetik yöntemle analizi, Yıldız Teknik Üniversitesi, Fen Edebiyat Fakültesi, Kimya Bölümü, 1990

Research Areas

Chemistry, Analytical Chemistry, Separation Methods, Food Analysis, Chromatographic Analysis, Spectroscopical Methods, Natural Sciences

Supervised Theses

ÇETİN G., Antosiyaların yaban mersini meyvelerinden ekstraksiyonu ve spektrofotometrik yöntemlerle tayinleri, Postgraduate, G.Yoklayan(Student), 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Development of Mn₃(PO₄)₂ nanoplates assisted treatment strategy for the removal of cadmium from synthetic domestic wastewater**
Öner M., Akbıyık H., Gürsoy S., Demir C., ÇETİN G., BAKIRDERE S.
Chemical Engineering Communications, 2025 (SCI-Expanded)
- II. **Synthesis of calcium phosphate nanomaterial from quail eggshell for cadmium removal from wastewater and its genotoxic/cytotoxic properties**

- Demir C., Bakirdere B. E., Zaman B. T., Öner M., DALGIÇ BOZYİĞİT G., Ergenler A., Turan F., Nejati O., Öztürk A. B., ÇETİN G., et al.
Environmental Monitoring and Assessment, vol.196, no.12, 2024 (SCI-Expanded)
- III. **Microwave-Assisted Hydrothermal Synthesis of Zinc-tin Based Nanoflower for the Adsorptive Removal of Cadmium from Synthetic Wastewater**
Toprak M., YILDIZ O. B., Zaman B. T., DALGIÇ BOZYİĞİT G., Temuge İ. D., ÇETİN G., BAKIRDERE S.
Water, Air, and Soil Pollution, vol.235, no.5, 2024 (SCI-Expanded)
- IV. **Synthesis of Nanocube-Shaped Cobalt Tin Hydroxides for the Preconcentration of Lead in Environmental Seawater Collected from Antarctic Region**
Şaylan M., Ayyıldız M. F., Zaman B. T., Korkunç Ü., Gürsoy S., ÇETİN G., BAKIRDERE S.
ChemistrySelect, vol.9, no.9, 2024 (SCI-Expanded)
- V. **A simple and effective graphene oxide-zinc oxide nanocomposite based solid phase extraction method for the determination of cadmium in tea matrix at trace levels by flame atomic absorption spectrophotometry**
Demir C., Öner M., ÇETİN G., BAKIRDERE S.
Journal of Food Composition and Analysis, vol.127, 2024 (SCI-Expanded)
- VI. **Development of Analytical Strategy for the Determination of Cadmium by Flame Atomic Absorption Spectrometry After Dithizone/Deep Eutectic Solvent Probe Based Liquid Phase Microextraction**
Akbiyik H., Serbes H., Kilinç Y., Oflu S., Gürsoy S., Özdoğan N., ÇETİN G., BAKIRDERE S.
Analytical Letters, 2024 (SCI-Expanded)
- VII. **Colorimetric Sensor Based AgNPs for the Detection of Cyanide using UV-Vis Spectrophotometry**
Girgin A., Akbiyik H., Zaman B. T., ÇETİN G., BAKIRDERE S.
ChemistrySelect, vol.8, no.33, 2023 (SCI-Expanded)
- VIII. **Development of a rapid and efficient analytical method for trace lead determination: Manganese dioxide nanoflower based dispersive solid-phase extraction**
Öner M., Demir C., ÇETİN G., BAKIRDERE S.
Measurement: Journal of the International Measurement Confederation, vol.211, 2023 (SCI-Expanded)
- IX. **Nickel hydroxide nanoflower-based dispersive solid-phase extraction of copper from water matrix**
Şaylan M., Demirel R., Ayyıldız M. F., Chormey D. S., ÇETİN G., BAKIRDERE S.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.195, no.1, 2023 (SCI-Expanded)
- X. **Microwave assisted effective synthesis of CdS nanoparticles to determine the copper ions in artichoke leaves extract samples by flame atomic absorption spectrometry**
Şaylan M., Metin B., Akbiyik H., Turak F., Çetin G., Bakirdere S.
JOURNAL OF FOOD COMPOSITION AND ANALYSIS, vol.115, 2023 (SCI-Expanded)
- XI. **Chromium removal from tannery wastewaters with a strong cation exchange resin and species analysis of chromium by MINEQL**
KOCAOBA S., ÇETİN G., AKÇİN G.
SCIENTIFIC REPORTS, vol.12, no.1, 2022 (SCI-Expanded)
- XII. **Surface complexation modelling of chromium(III) ion exchange by a strong cation exchange resin**
Kocaoba S., Çetin G., Akçin G.
INTERNATIONAL JOURNAL OF ENVIRONMENTAL ANALYTICAL CHEMISTRY, 2020 (SCI-Expanded)
- XIII. **Hydride generation-flame atomic absorption spectrometric quantification of trace lead after the extraction by fatty acid functionalized Fe₃O₄ nanoparticles assisted dispersive solid-phase extraction: A sensitive, precise and accurate analytical method**
Akkaya E., Ozturk E., Kasa N. A., ÇETİN G., KOMESLİ O. T., BAKIRDERE S.
Journal of Analytical Atomic Spectrometry, vol.35, no.5, pp.961-966, 2020 (SCI-Expanded)
- XIV. **EXTRACTION OF ANTHOCYANINS FROM FRUITS OF BERRIES BY ULTRASOUND ASSISTED METHOD AND QUANTIFICATION OF TOTAL MONOMERIC ANTHOCYANINS WITH SPECTROPHOTOMETRIC METHODS**
Kundakci G. Y., ÇETİN G.
FRESENIUS ENVIRONMENTAL BULLETIN, vol.29, no.4, pp.2228-2234, 2020 (SCI-Expanded)

- XV. **Determination of trace nickel in spinach samples using the combination of vortex-assisted deep eutectic solvent-based liquid phase microextraction and slotted quartz tube-flame atomic absorption spectrometry**
 Alacakoç B., Tekin Z., UNUTKAN T., ÇETİN G., BAKIRDERE S.
Atomic Spectroscopy, vol.40, no.6, pp.233-237, 2019 (SCI-Expanded)
- XVI. **Ultrasound assisted deep eutectic solvent based microextraction-slotted quartz tube-flame atomic absorption spectrometry for the determination of cadmium**
 UNUTKAN T., Tişli B., Tekin Z., ÇETİN G., BAKIRDERE S.
SPECTROCHIMICA ACTA PART B-ATOMIC SPECTROSCOPY, vol.155, pp.1-3, 2019 (SCI-Expanded)
- XVII. **A new combination for the determination of ultratrace cadmium: solid-phase microextraction by stearic acid-coated magnetic nanoparticles prior to batch-type hydride generation atomic absorption spectrometry**
 KASA N. A., AKKAYA E., ZAMAN B. T., Cetin G., BAKIRDERE S.
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.190, no.10, 2018 (SCI-Expanded)
- XVIII. **A new method for the determination of cadmium at ultratrace levels using slotted quartz tube-flame atomic absorption spectrometry after preconcentration with stearic acid coated magnetite nanoparticles**
 AKKAYA E., KASA N. A., Cetin G., BAKIRDERE S.
JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY, vol.32, no.12, pp.2433-2438, 2017 (SCI-Expanded)
- XIX. **Enrichment of Chromium(III) from Tannery Sludge in the Presence of Calcium**
 ÇETİN G., KOCAOBA S., AKCİN G.
ASIAN JOURNAL OF CHEMISTRY, vol.25, no.12, pp.6851-6855, 2013 (SCI-Expanded)
- XX. **Removal and Recovery of Chromium from Solutions Simulating Tannery Wastewater by Strong Acid Cation Exchanger**
 Cetin G., Kocaoba S., Akcin G.
JOURNAL OF CHEMISTRY, 2013 (SCI-Expanded)
- XXI. **CATION EXCHANGE EQUILIBRIA WITH CHROMIUM (III) SPECIES BY STRONG ACID ION EXCHANGERS**
 Çetin G., Kocaoba S., Hoell W. H., Akçin G.
SOLVENT EXTRACTION AND ION EXCHANGE, vol.30, pp.88-100, 2012 (SCI-Expanded)
- XXII. **A spectrophotometric method for the determination of lisinopril in tablet formulation**
 ÇETİN G., Sungur S.
REVIEWS IN ANALYTICAL CHEMISTRY, vol.25, no.1, pp.1-10, 2006 (SCI-Expanded)
- XXIII. **The simultaneous determination of hydrochlorothiazide and cilazapril in tablet formulation by high performance liquid chromatography**
 ÇETİN G., Sungur S.
FRESENIUS ENVIRONMENTAL BULLETIN, vol.14, no.5, pp.353-356, 2005 (SCI-Expanded)

Articles Published in Other Journals

- I. **Determination of Atraton in Irrigation Canal Water and Soil Samples by Gas Chromatography Mass Spectrometry**
 ÇETİN G.
Avrupa Bilim ve Teknoloji Dergisi, vol.0, no.27, pp.522-525, 2021 (Peer-Reviewed Journal)
- II. **Effect of mobile phase variation and purification on chromatogram view by using fruits and rose extracts and HPLC method**
 ÇETİN G., Turak F.
International Journal of Chemistry, vol.8, no.3, pp.25-29, 2016 (Peer-Reviewed Journal)
- III. **Removal of hardness of earth alkaline metals from aqueous solutions by ion exchange method**
 ÇETİN G.
ISRN Analytical Chemistry, pp.1-7, 2014 (Peer-Reviewed Journal)

- IV. The liquid chromatographic analyse of cibadrex tablet
ÇETİN G., Sungur S.
International Journal of Chemistry, vol.14, no.3, pp.161-164, 2004 (Non Peer-Reviewed Journal)
- V. A spectrophotometric method for the determination of cilazapril in tablet formulation
ÇETİN G., Sungur S.
INTERNATIONAL JOURNAL OF CHEMISTRY, vol.14, no.1, pp.1-6, 2004 (Peer-Reviewed Journal)
- VI. A spectrophotometric method for the determination of amlodipine in pharmaceutical formulation
ÇETİN G., Sungur S.
SCIENTIA PHARMACEUTICA, vol.63, pp.93-98, 1995 (Scopus)

Papers Published in Refereed Scientific Meetings

- I. Mikrodalga Destekli Hidrotermal Sentez Yöntemi Elde Edilen Çinko-Kalay Nanoçiçekler Kullanılarak Kesikli Tip Adsorpsiyon Esası Giderim Prosedürü ile Sentetik Atık Sudan Kadmiyum Elementinin Uzaklaştırılması
TOPRAK M., YILDIZ B., ZAMAN B. T., DALGIÇ BOZYİĞİT G., DURUKAN TEMUGE İ., ÇETİN G., BAKIRDERE S.
8. Ulusal Çevre Kongresi, Turkey, 15 December 2023
- II. Cyanide Detection with UV-Vis Spectrophotometer Based on the Colorimetric Detection by Using Silver Nanoparticles
Girgin A., Akbıyık H., Zaman B. T., ÇETİN G., BAKIRDERE S.
4th International Environmental Chemistry (EnviroChem) Congress, Antalya, Turkey, 30 October - 02 November 2022
- III. CoSn(OH)₆ Nanocube Based Dispersive Solid Phase Extraction for the Sensitive Determination of Lead Ions in Environmental Samples by Flame Atomic Absorption Spectrometry
Şaylan M., Fırat Ayyıldız M., Zaman B. T., POLAT Ü., Gürsoy S., ÇETİN G., BAKIRDERE S.
4th International Environmental Chemistry (EnviroChem) Congress, Antalya, Turkey, 30 October - 02 November 2022
- IV. NİKEL HİDROKSİT NANOÇİEK ESASLI DAĞITICI KATI FAZ EKSTRAKSİYON YÖNTEMİ İLE BAKIR İYONLARININ MUSLUK SUYU ÖRNEKLERİNDEN ESER SEVİYELERDE TAYİNİ
Şaylan M., Demirel R., Fırat Ayyıldız M., Chormey D. S., ÇETİN G., BAKIRDERE S.
10. Ulusal Analitik Kimya Kongresi, Muğla, Turkey, 7 - 11 September 2022
- V. Development of a novel and effective solid phase extraction method based on reduced graphene oxide-zinc oxide nanoflowers for the sensitive determination of cadmium by flame atomic absorption spectrophotometry
Demir C., Öner M., ÇETİN G., BAKIRDERE S.
4th International Congress on Analytical and Bioanalytical Chemistry, Turkey, 23 - 26 March 2022, pp.51
- VI. Development of a rapid and efficient dispersive solid phase extraction for the determination of lead at trace levels: Manganese oxide nanoflower based dispersive solid phase extraction prior to flame atomic absorption spectrometry measurement
Öner M., Demir C., BAKIRDERE S., ÇETİN G.
4th International Congress on Analytical and Bioanalytical Chemistry, Turkey, 23 - 26 March 2022, pp.53
- VII. A novel cadmium sulfide nanoparticles based dispersive solid phase extraction for accurate determination of copper ions in artichoke leaves extract by flame atomic absorption spectrophotometry
Şaylan M., Metin B., Akbıyık H., Turak F., ÇETİN G., BAKIRDERE S.
4th International Congress on Analytical and Bioanalytical Chemistry, Turkey, 23 - 26 March 2022, pp.52
- VIII. Synthesis and characterization of copper and nickel nanoflowers having several application field
ÇETİN G.
3rd International Conference on Preventive Medicine, İstanbul, Turkey, 24 - 27 November 2021
- IX. Trace Determination of Cadmium using Ultrasound Assisted Deep Eutectic Solvent Microextraction -

- Slotted Quartz Tube - Flame Atomic Absorption Spectrometry**
Unutkan T., Tişli B., Tekin Z., Çetin G., Bakırdere S.
2nd International Congress on Analytical and Bioanalytical Chemistry (2nd ICABC 2020), Antalya, Turkey, 11 - 14 March 2020, pp.92
- X. **Determination of Ultratrace Cadmium by a New Combination: Solid Phase Microextraction by Stearic Acid Coated Magnetic Nanoparticles Prior To Batch Type Hydride Generation Atomic Absorption Spectrometry**
Kasa N. A., Akkaya E., Zaman B. T., ÇETİN G., BAKIRDERE S.
8TH BLACK SEA BASIN CONFERENCE ON ANALYTICAL CHEMISTRY, İstanbul, Turkey, 09 May 2018, pp.67
- XI. **Yaban mersini meyvelerinden elde edilen antosiyandinlerin spektroskopik yöntemler ile tayini**
Yoklayan Kundakçı G., ÇETİN G.
29.Uluslararası Kimya Kongresi, Ankara, Turkey, 10 - 14 September 2017
- XII. **Stability studies on extracts of anthocyanins obtained from berries**
Yoklayan Kundakçı G., ÇETİN G.
International Conference 10 th Aegean Analytical Chemistry Days, Çanakkale, Turkey, 29 September - 02 October 2016
- XIII. **Extraction of anthocyanines from fruits**
ÇETİN G., Yoklayan G.
International symposium on molecular chemistry, İstanbul, Turkey, 18 - 19 December 2014
- XIV. **Endüstriyel sularda toprak alkali metal sertliğinin giderilmesi**
ÇETİN G.
26. Ulusal Kimya Kongresi, Muğla, Turkey, 1 - 06 October 2012
- XV. **Deri atık çamur efluentinden kalsiyum ve krom metallerinin ayrılması ve geri kazanılması**
ÇETİN G., Hoell W. H., Kumbasar N., Ergun M., Akçin G.
XXII. Ulusal Kimya Kongresi, KKTC / Mağusa, Cyprus (Kktc), 6 - 10 October 2008
- XVI. **Separation of ionic mixtures by parametric pumping with variation of pH**
ÇETİN G., Kumbasar N., Mutafoglu G., Akçin G.
4th Black Sea Basin Conference on Analytical Chemistry, Sunny Beach, Bulgaria, 19 - 23 September 2007
- XVII. **Krom ve kalsiyumun sulu ortamdan uzaklaştırılması ve geri kazanılması**
ÇETİN G., Kocaoba S., Akçin G., Hoell W. H.
XX. Ulusal Kimya Kongresi, Kayseri, Turkey, 4 - 08 September 2006
- XVIII. **The profile of leather industry in Turkey**
Akçin G., Höll W. H., ÇETİN G., Kocaoba S.
3 rd Black sea basin conference on analytical chemistry, Constanta, Romania, 12 - 14 September 2005
- XIX. **Metal uptake of different sorbents**
ÇETİN G., Yenigül E., Erguney E., Akçin G.
Fifth congress of pure and applied chemistry for the students of Macedonia, Skopje, Macedonia, 16 - 18 October 2003
- XX. **The spectrophotometric analyse of lisinopril in tablet formulation**
ÇETİN G., Sungur S.
2nd Black Sea Basin Conference on Analytical Chemistry, İstanbul, Turkey, 14 - 17 September 2003, pp.231
- XXI. **Silazaprilin spektrofotometrik yöntemle tayini**
ÇETİN G., Sungur S.
XVII. Ulusal Kimya Kongresi, İstanbul, Turkey, 8 - 11 September 2003
- XXII. **Katyonik reçinelerde denge değişiminin incelenmesi**
Kocaoba S., ÇETİN G., Höll W. H., Akçin G.
VIII. Ulusal Spektroskopi Kongresi, Bursa, Turkey, 30 October - 01 November 2002
- XXIII. **Cation Exchange Separation of Chromium (III) in Tannery Wastewaters**
KOCAOBA S., Çetin G., Hoell W., Akçin G.
4th Aegean Analytical Chemistry Days
- XXIV. **Recovery of Chromium from Tannery Wastewaters**

- Çetin G., KOCAOBA S., Hoell W.
Ion Exchange Technology for Today and Tomorrow
- XXV. **Katyonik Reçinelerle Denge Değişiminin İncelenmesi**
KOCAOBA S., Çetin G., Hoell W., Akçin G.
17. Ulusal Spektroskopi Kongresi
- XXVI. **İyon Değiştircilerle Ağır Metal Uzaklaştırılması ve Geri Kazanılması**
KOCAOBA S., Çetin G., Hoell W., Akçin G.
17. Ulusal Kimya Kongresi

Supported Projects

ÇETİN G., AKBIYIK H., SERBEST H., BAKIRDERE S., ÖZDOĞAN N., Oflu S., Kılınç Y., Project Supported by Higher Education Institutions, Çevre Örneklerinde Bulunan Kadmiyum Elementinin Yüksek Doğruluk ve Duyarlılıkta Tayinine Yönelik Çevreci Kolorimetrik ve Spektroskopik Analitik Yöntemlerin Geliştirilmesi, 2022 - 2023

ÇETİN G., ŞAYLAN M., DEMİREL R., FIRAT AYYILDIZ M., CHORMEY D. S., Project Supported by Higher Education Institutions, Nikel esaslı nanoçiek yapıları kullanılarak bakırın eser seviyelerde tayinine yönelik yüksek doğruluk ve duyarlılıkta analitik yöntem geliştirilmesi, 2021 - 2023

ÇETİN G., BAKIRDERE S., Akkaya E., ÖZTÜRK ER E., Kasa N. A., KOMESLİ O. T., Project Supported by Higher Education Institutions, Kurşunun Stearik Asit Kaplı Demir Manyetik Nanopartiküller ile Ekstraksiyonu/Önderişitirilmesi Sonrası HO-AAS Sisteminde Eser Seviyelerde Tayini, 2018 - 2019

ÇETİN G., Project Supported by Higher Education Institutions, Endüstriyel Atıklardan Ve Meyve-Sebzelerden Farklı Ekstraksiyon Yöntemleri ile Doğal Boyarmadde Eldesi Ve Gıda-Tekstil Alanında Uygulanabilirliği, 2012 - 2015

AKÇİN G., ÇETİN G., Project Supported by Higher Education Institutions, Metal sanayii kaplama banyoları çalkalama sularında bulunan metallerin parametric pumping yöntemi ile geri kazanılması, 2004 - 2007

Turhan K., Akçin G., Çetin G., Project Supported by Higher Education Institutions, Metal Sanayi Kaplama Banyoları Çalkalama Sularında Bulunan Metallerin Parametric Pumping Yöntemi ile Geri Kazanılması, 2004 - 2007

Akçin G., Çetin G., Kocaoba S., TUBITAK Project, Kromun deri fabrikası atiksularından uzaklaştırılması ve geri kazanılması, 2005 - 2006

ÇETİN G., Other International Funding Programs, Metal sanayiinde kaplama banyoları atık çalkalama sularında bulunan Ni(II), Co(II), Cd(II) ve Cu(II) gibi metallerin pH değişimi ile uygulanan parametric pumping yöntemi ile ayrılarak geri kazanılması, 2004 - 2006

Akçin G., Çetin G., Kocaoba S., Other International Funding Programs, Chromium removal and recovery from tannery wastewaters, 2001 - 2005

Memberships / Tasks in Scientific Organizations

Türkiye Kimya Derneği, Member, 1987 - Continues
Kimya Mühendisleri Odası, Member, 1987 - Continues

Metrics

Publication: 56
Citation (WoS): 43
Citation (Scopus): 120
H-Index (WoS): 4
H-Index (Scopus): 7

Congress and Symposium Activities

Determination of ultratrace cadmium by a new combination: Solid phase microextraction by stearic acid coated magnetic nanoparticles prior to batch type hydride generation atomic absorption spectrometry, Working Group, İstanbul, Turkey, 2018

Yaban mersini meyvelerinden elde edilen antosiyaniñlerin spektroskopik yöntemler ile tayini, Attendee, Ankara, Turkey, 2017

Stability studies on extracts of anthocyanines obtained from berries, Attendee, Çanakkale, Turkey, 2016

Extraction of anthocyanines from fruits, Attendee, İstanbul, Turkey, 2014

Endüstriyel sularda toprak alkali metal sertliğinin giderilmesi, Attendee, Muğla, Turkey, 2012

Deri atık çamur efluentinden kalsiyum ve krom metallerinin ayrılması ve geri kazanılması, Attendee, Gazimagusa, Cyprus (Kktc), 2008

Separation of ionic mixtures by parametric pumping with variation of pH, Attendee, Sofija, Bulgaria, 2007

Removal and recovery of chromium from tannery sludges, Attendee, Thessaloníki, Greece, 2006

Krom ve kalsiyumun sulu ortamdan uzaklaştırılması ve geri kazanılması, Attendee, Kayseri, Turkey, 2006

The profile of leather industry in Turkey, Attendee, Constanta, Romania, 2005

Recovery of heavy metals from wastewater, Attendee, Constanta, Romania, 2005

Kromun deri atıksuyundan amberjet reçinesi ile uzaklaştırılması ve geri kazanılması, Attendee, Malatya, Turkey, 2004

Cation exchange separation of chromium(III) in tannery wastewaters, Working Group, İzmir, Turkey, 2004

Recovery of chromium from tannery wastewaters, Working Group, London, United Kingdom, 2004

Cibadrex tablet bileşenlerinin yüksek basınçlı sıvı kromatografisi ile analizi, Attendee, Kars, Turkey, 2004

Metal uptake of different sorbents, Attendee, Skopje, Macedonia, 2003

İyon değiştiricilerle ağır metal uzaklaştırılması ve geri kazanılması, Attendee, İstanbul, Turkey, 2003

Equilibrium and regeneration kinetic of chromium in aqua media, Attendee, İstanbul, Turkey, 2003

Silazaprilin spektrofotometrik yöntemle tayini, Attendee, İstanbul, Turkey, 2003

The spectrophotometric analyse of lisinopril in tablet formulation, Attendee, İstanbul, Turkey, 2003

Katyonik reçinelerde denge değişiminin incelenmesi, Attendee, Bursa, Turkey, 2002