

CURRICULUM VITAE

Abbas Afkhami
Faculty of Chemistry
Bu-Ali Sina University
Hamadan
Iran
E.mail: afkhami@basu.ac.ir
Date of birth: 1961



Education:

Ph. D.	1991	Analytical Chemistry, Shiraz University, Shiraz, Iran
M. Sc.	1988	Analytical Chemistry, Shiraz University, Shiraz, Iran
B. Sc.	1986	Chemistry, Shiraz University, Shiraz, Iran

Teaching and Research Positions:

Professor	August 2001 – Present, Bu-Ali Sina University
Research Associate	2000-2001, Ottawa University, Ottawa ON, Canada
Associate Professor	July 1997- August 2001, Bu-Ali Sina University
Assistant Professor	September 1991-June 1997, Bu-Ali Sina University

Teaching Experiences:

Bu-Ali Sina University (1991-Present) Lecturing to B. Sc and M. Sc and Ph. D. students.

The offered courses:

For Undergraduate Students:

- General chemistry I & II
- Analytical Chemistry I & II
- Instrumental Analysis

For M. Sc. Students:

- Advanced Analytical Chemistry
- Spectrochemical Analysis I & II

For Ph. D. Students:

- Thermal Methods of Analysis
- Kinetic Methods in Analytical Chemistry
- Recent Advances in Instrumental Analysis
- Bioanalytical Chemistry

Field of Interest in Research:

- Environmental analyses
- Introduction of new methods for the determination of trace amounts of inorganic and organic species
- Development of new methods for preconcentration of chemical species from water samples and water purification
- Introduction of new methods for simultaneous determination of trace amounts of analytes

Awards:

- International scientist by ISI (ESI).
- Award of the organization of the Islamic countries' (COMSTECH Award), 2009.
- Distinguished Professor of the I. R. Iran Universities, 2012.
- Distinguished analytical chemist of Iran, selected by the Iranian Chemical Society, 2010.
- Distinguished Researcher of Bu-Ali Sina University, selected by the Ministry of Science, Research and Technology, 2004.

Membership in Academic Societies

- Iranian Chemical Society
- American Chemical Society
- Editor-in-Chief, Analytical and Bioanalytical Chemistry Research
- Editorial Board, Green and Sustainable Chemistry
- Board of directors, Iranian Chemical Society

Students Graduated:

(i) M. Sc. Degree:

1. A. Mogharnesband, "Kinetic spectrophotometric Determination of nitrite", Bu-Ali Sina University, 1994.
2. H. Bahrami, "Kinetic spectrophotometric determination of trace amounts of manganese and thiocyanate", Bu-Ali Sina University, 1994.
3. F. Mosaed, "Kinetic spectrophotometric determination of trace amounts of sulfide and selenium", Bu-Ali Sina University, 1995.
4. F. Jalali, "Catalytic spectrophotometric Determination of nitrite", Bu-Ali Sina University, 1996.
5. A. R. Zarei, "Simultaneous determination of binary mixtures of some aromatic aldehydes by derivative spectrophotometry", Bu-Ali Sina University, 1996.
6. Z. Barahman, "Determination of trace amounts of iodide and bromide ions by a kinetic spectrophotometric method", Bu-Ali Sina University, 1997.
7. M. Rezaei, "Kinetic spectrophotometric determination of trace amounts of sulfite, formaldehyde and acetaldehyde", Bu-Ali Sina University, 1999.
8. H. A. Khatami, "Kinetic spectrophotometric determination of trace amounts of benzenediols and some catecholamines", Bu-Ali Sina University, 2000.
9. A. Afshar Assl, "Kinetic spectrophotometric determination of trace amounts of hydrazine, phenylhydrazine and As(III) & Determination of trace amounts of beryllium by atomic abs after preconcentration on anion exchange resin", Bu-Ali Sina University, 2000.
10. A. Nouri-Zadeh, "Spectrophotometric determination of formaldehyde and some catecholamines & Kinetic-spectrophotometric determination

- of selenium after preconcentration on activated carbon”, Bu-Ali Sina University, 2000.
11. E. Tammari, “Kinetic spectrophotometric determination of trace amounts of V(V) and V(IV) & Estimation of chemical rate constants of the ECE and EC electrochemical mechanisms by simulation method”, Bu-Ali Sina University, 2002.
 12. A. Abdolmaleki, “Kinetic spectrophotometric determination of trace amounts of antimony(III, V)”, Bu-Ali Sina University, 2003.
 13. L. Khalafi, “Spectrophotometric determination of some catecholamines by electrolytically generation of their colored derivatives”, Bu-Ali Sina University, 2003.
 14. H. Tahmasebi, "The study of the charge transfer complexes of a recently synthesized polyamine ligand containing salicylaldehyde groups with some electron acceptors in several non-aqueous solvents", Bu-Ali Sina University, 2005.
 15. H. Siampour, “Cloud point extraction and determination of trace quantities of bismuth, cadmium and mercury in biological and water samples”, Bu-Ali Sina University, 2005.
 16. A. Maleki, “Kinetic-spectrophotometric determination of hydroxylamine based on its reaction with iodate and spectrophotometric determination of hydroxylamine and nitrite after cloud point extraction”, Bu-Ali Sina University, 2005.
 17. (Co-supervisor) T. Shariatmanesh, "Electrochemical oxidation of catechol and its derivatives in the presence of azide ion and catalytic determination of azide ion in the presence of 3,4-dihydroxy benzonitrile", Bu-Ali Sina University, 2006.
 18. A. Amini, “Preconcentration of Cd^{2+} , Ag^+ , Ni^{2+} , Sb^{3+} , Sr^{2+} , Ti^+ , MoO_4^{2-} and WO_4^{2-} from water systems on activated carbon cloth”, Bu-Ali Sina University, 2006.
 19. E. Bozorgzadeh, “Spectrophotometric determination of trace amounts of beryllium and simultaneous determination of beryllium and aluminium after preconcentration by cloud point extraction”, Bu-Ali Sina University, 2006.
 20. Z. Karimi, “Preconcentration of cations Bi^{3+} , Cu^{2+} , Fe^{3+} , Co^{2+} , Sn^{4+} , Zn^{2+} , Pb^{2+} and anions NO_3^- and NO_2^- from water systems carbon cloth, Bu-Ali Sina University, 2006.
 21. A. Karimi, “Electrochemically prepared polypyrrole film as a new fiber for headspace solid phase microextraction of captopril samples and analysis with ion mobility spectrometry”, Bu-Ali Sina University, 2007.

22. M. Rohani, "Investigation of the effect of β -cyclodextrin on the equilibrium of some organic acids in water and ethanol-water mixtures and Effect of micellar media on kinetic-spectrophotometric determination of nitrite based on its reaction with neutral red", Bu-Ali Sina University, 2008.
23. (Co-Supervisor) M. Hajihadi, "Rapid and simple method for spectrophotometric determination of cationic surfactants using Be and AL-Chrome Azurol S-surfactant ternary complexes", Bu-Ali Sina University, 2008.
24. B. Aleseyyed, "design and characterization of nitrite and ascorbic acid optical sensors based on immobilization of methyl violet and methylene blue on triacetylcellulose membrane", Bu-Ali Sina University, 2009.
25. F. Zare, " Kinetic-spectrophotometric determination of trace amounts of chloride, bromide and iodide," Bu-Ali Sina University, 2009.
26. R. Moosavi, "Application of maghemite nanoparticles as an adsorbent for removal and preconcentration of congo red and malachite green", Bu-Ali Sina University, 2010.
27. S. Soltanbeigi,
28. R. Ahmadi Khoei, "Application of alumina nanoparticles for the removal of cadmium and sulfide from water samples" Bu-Ali Sina University, 2011.
29. M. Rezaei, Some analytical applications of nitro benzoyl diphenylmethylenephosphorane (NBDMP), Bu-Ali Sina University, 2011.
30. S. Siavashi, Effective removal of benzoic acid, p-nitrophenol and resorcinol from aqueous solutions by modified maghemite nanoparticles, Bu-Ali Sina University, 2011.
31. M. Zare, Investigation of the effect of surfactants on the determination of nitrite based on its reaction with aromatic amines, Bu-Ali Sina University, 2012.
32. A. Farnoodian Habibi, Removal , preconcentration and determination of some important drugs using modified magnetite with suitable agents, Bu-Ali Sina University, 2012.
33. S. Sayari, Synthesis of (NiZnFe₂O₄) nano-composite and investigation of its efficiency on the removal of organic dyes from aqueous solutions and preparation of modified electrochemical sensors, Bu-Ali Sina University, 2013.
34. M. Soltani, "Construction of electrochemical sensors based on modified nano-silica for simultaneous determination of some heavy metal ions", Bu-Ali Sina University, 2014.

35. F. Faryadrass, Application of $\gamma\text{-Fe}_2\text{O}_3\text{@Ag}$ nanocomposites for the removal of pollutants of sulfur and cadmium ions from water samples, Bu-Ali Sina University, 2014.
36. (Co-supervisor) M. Malmir, Design and construction of new sensors for determination of hypochlorite and melamine in foodstuff samples, Bu-Ali Sina University, 2014.
37. S. Aghajani, removal of some pollutants from water samples using nickel-zinc-ferrite nano-composite, Bu-Ali Sina University, 2014.
38. (Co-supervisor) L. Arshadi,
39. (Co-supervisor) E. Vanaei,
40. Kh. Dinmohamadi Asl, Determination of some opiate drugs using platinum coated magnetic nanoparticles, Bu-Ali Sina University, 2016.
41. V. Zahedifar, Determination of some drugs containing amino groups using magnetic nanoparticles coated with Au nanoparticles, Bu-Ali Sina University, 2016.

(ii) *Ph. D. Degree:*

1. A. R. Zarei, "Spectrophotometric simultaneous determination of some chemical species using H-point standard addition and first derivative techniques", Bu-Ali Sina University, 2004.
2. M. Bahram, "Application of PLS, HPSAM and presentation of two new chemometrics methods for simultaneous analysis of binary and ternary mixtures and handling of scatter for PARAFAC modeling of fluorescence data using interpolation, Bu-Ali Sina University, 2005.
3. N. Sarlak, "Simultaneous spectrophotometric determination of some drugs and chemical species by partial least squares (PLS) and H-point standard addition methods and determination of chemical species by optical sensors", Bu-Ali Sina University, 2006.
4. L. Khalafi, "Investigation of the behavior of some organic compounds in the presence of cyclodextrin", Bu-Ali Sina University, 2007.
5. M. Abbasi-Tarighat, "Application of artificial neural networks (ANNs) and wavelet transformation (WT) for simultaneous analysis of multi-component mixtures and introducing of the new strategies for removing matrix effect, data reduction and data processing in complex mixtures", Bu-Ali Sina University, 2009.
6. R. Norooz-Asl, "Application of micellar media and nanoparticles for extraction of some chemical species", Bu-Ali Sina University, 2009.
7. F. Khajavi, "Application of chemometric methods for investigation of the behavior of some chemical systems", Bu-Ali Sina University, 2011.

8. (Co-supervisor) H. Bagheri, "Separation, preconcentration and determination of some toxic and hazardous chemical species using nanoparticles prepared by various methods as solid phase extractors", Islamic Azad University, Science and Research branch, 2012.
9. H. Ghaedi,
10. F. Soltani-Felegari, "Electrochemical synthesis of nanoparticles for construction of modified carbon paste electrodes for the determination of some biological and pharmaceutical species", Bu-Ali Sina University, 2014.
11. H. Khoshshafar, H. Khoshshafar, "Application of modified nanoparticles for electrochemical determination of some important species in environmental and biological samples", Bu-Ali Sina University, 2014.
12. A. Shirzadmehr, "Designing and fabrication of new high performance sensors based on carbon paste electrodes modified with nanomaterials and Schiff bases for the detection and determination of some environmental pollutants", Bu-Ali Sina University, 2014.
13. R. Moosavi, "Synthesis and application of iron oxide and silver nano materials for removal and determination of organic and inorganic pollutants from water and wastewater samples", Bu-Ali Sina University, 2015.

PUBLICATIONS:

- 255- H. Bagheri, **A. Afkhami**, H. Khoshshafar, A. Hajian, A. Shahriyari, "Protein capped Cu nanoclusters-SWCNT nanocomposite as a novel candidate of high performance platform for organophosphates enzymeless biosensor", Biosense. Bioelectron., In press.
- 254-**A. Afkhami**, P. Hashemi, H. Bagheri, J. Salimian,, A. Ahmadi, T. Madrakian, "Impedimetric immunosensor for the label-free and direct detection of botulinum neurotoxin serotype A using Au nanoparticles/graphene-chitosan composite", Biosense. Bioelectron. , In press.
- 253- H. Bagheri, H. Khoshshafar, **A. Afkhami**, S. Amidi, "Sensitive and simple simultaneous determination of morphine and codeine using a Zn₂SnO₄ nanoparticle/graphene composite modified electrochemical sensor", New J. Chem., 40 (2016) 7102—7112.
- 252- T. Madrakian, M. Ghadiri, M. Ahmadi, **A. Afkhami**, "Application of cysteamine functionalized CdS hollow nanospheres in determination of Cd(II) and Pb(II) in the presence of each other by resonance light scattering technique", J. Environ. Chem. Eng., 4 (2016) 3484–3491.
- 251-T. Madrakian, K. Dinmohamadi Asl, M. Ahmadi, **A. Afkhami**, "Fe₃O₄@Pt/MWCNT/carbon paste electrode for determination of a doxorubicin anticancer drug in a human urine sample", RSC Adv. 6 (2016) 72803–72809.
- 250-H. Bagheri, N. Pajooheshpour, **A. Afkhami**, H. Khoshshafar, "Fabrication of a novel electrochemical sensing platform based on a core-shell nano-structured/

- molecularly imprinted polymer for sensitive and selective determination of ephedrine”, *RSC Adv.*, *6* (2016) 51135-51145.
- 249- **Afkhami**, F. Gomar, T. Madrakian, “CoFe₂O₄ nanoparticles modified carbon paste electrode for simultaneous detection of oxycodone and codeine in human plasma and urine”, *Sens. Actuators B*, *233* (2016) 263–271.
- 248- H. Bagheri, **A. Afkhami**, A. Noroozi, “Removal of pharmaceutical compounds from hospital wastewaters using nanomaterials: A review”, *Anal. Bioanal. Chem. Res.*, *3* (2016) 1-18.
- 247- T. Madrakian, H. Ghasemi, E. Haghshenas, **A. Afkhami**, “Preparation of a ZnO nanoparticles/multiwalled carbon nanotubes/carbon paste electrode as a sensitive tool for capecitabine determination in real samples”, *RSC Adv.*, *6* (2016) 33851-33856.
- 246- T. Madrakian, S. Maleki, M. Heidari, **A. Afkhami**, “An electrochemical sensor for rizatriptan benzoate determination using Fe₃O₄ nanoparticle/multiwall carbon nanotube-modified glassy carbon electrode in real samples”, *Mater. Sci. Eng. C*, *63* (2016) 637–643.
- 245- T. Madrakian, H. Ghasemi, **A. Afkhami**, E. Haghshenas, “ZnO/rGO nanocomposite/carbon paste electrode for determination of terazosin in human serum samples”, *RSC Adv.*, *6* (2016) 2552-2558.
- 244- T. Madrakian, F. Fazl, M. Ahmadi, **A. Afkhami**, “Efficient solid phase extraction of codeine from human urine samples using a novel magnetic molecularly imprinted nanoadsorbent and its spectrofluorometric determination”, *New J. Chem.*, *40* (2016) 122-129.
- 243- T. Madrakian, R. Haryani, M. Ahmadi, **A. Afkhami**, “A sensitive electrochemical sensor for rapid and selective determination of venlafaxine in biological fluids using carbon paste electrode modified with molecularly imprinted polymer-coated magnetite nanoparticles”, *J. Iran. Chem. Soc.*, *13* (2016) 243–251.
- 242- **A. Afkhami**, T. Madrakian, M. Soltani-Shahrivar, M. Ahmadi, H. Ghaedi, “Selective and sensitive electrochemical determination of trace amounts of mercury ion in some real samples using an ion imprinted polymer nano-modifier”, *J. Electrochem. Soc.*, *163* (2016) B68-B75.
- 241- M Ahmadi, T Madrakian, **A Afkhami**, “Solid phase extraction of amoxicillin using dibenzo-18-crown-6 modified magnetic-multiwalled carbon nanotubes prior to its Spectrophotometric determination”, *Talanta* *148* (2016) 122–128.
- 240- F. Fazl, M Ahmadi, T Madrakian, **A Afkhami**, “Effect of morphine, oxycodone and thebaine on resonance light scattering properties of human serum albumin: Investigation possibility of morphine determination in the presence of the two other drugs”, *Sens. Actuators B*, *223* (2016) 379–383.

- 239-A. **Afkhami**, A. Bahiraei, T. Madrakian, “Gold nanoparticles/multi-walled carbon nanotubes modified glassy carbon electrode as a sensitive voltammetric sensor for the determination of diclofenac sodium”, *Mater. Sci. Eng. C*, 59 (2016) 168–176.
- 238-R. Moosavi, S. Ramanathan, Y. Y. Lee, K. C. Siew Ling, A. Afkhami, G. Archunan, P. Padmanabhan, B. Gulyás, M. Kakran, S. T. Selvan, “Synthesis of antibacterial and magnetic nanocomposites by decorating graphene oxide surface with metal nanoparticles”, *RSC Adv*, 5 (2015) 76442-76450
- 237-E. Haghshenas, T. Madrakian, **A. Afkhami**, “A novel electrochemical sensor based on magneto Au nanoparticles/carbon paste electrode for voltammetric determination of acetaminophen in real samples”, *Mater. Sci. Eng. C*, 57 (2015) 205–214.
- 236-H. Bagheri, M. Ahmadi, T. Madrakian, **A. Afkhami**, “Preconcentration and spectrofluorometric determination of l-tryptophan in the presence of d-tryptophan using a chiral magnetic nanoselector”, *Sence. Actuators B*, 221 (2015) 681–687.
- 235-T. Madrakian, H. Bagherei, **A. Afkhami**, “Determination of human albumin in serum and urine samples by constant-energy synchronous fluorescence method”, *Luminescence*, 30 (2015) 576–582.
- 234-A. **Afkhami**, M. Soltani-Shahrivar, H. Ghaedi, T. Madrakian,” Construction of modified carbon paste electrode for highly sensitive simultaneous electrochemical determination of trace amounts of copper (II) and cadmium (II)”, *Electroanalysis*, 28 (2016) 296-303.
- 233-H. Bagheri, R. P. Talemi, **A. Afkhami**, “Gold nanoparticles deposited on fluorine-doped tin oxide surface as an effective platform for fabricating a highly sensitive and specific digoxin aptasensor”, *RSC Adv.*, 5 (2015) 58491–58498.

- 232-T. Madrakian, **A. Afkhami**, M. Ahmadi, E.Vanaei, “Solid phase extraction and spectrofluorometric determination of leached bisphenol A from some polycarbonate products under simulated use conditions using surface molecularly imprinted magnetite nanospheres”, *Anal. Methods*, 7 (2015) 6299-6306.
- 231-A. **Afkhami**, F. Kafrashi, M. Ahmadi, T. Madrakian, “A new chiral electrochemical sensor for the enantioselective recognition of naproxen enantiomers using L-cysteine self-assembled over gold nanoparticles at gold electrode” *RSC Adv.*, 5 (2015) 58609 - 58615.
- 230-A. **Afkhami**, F. Kafrashi, T. Madrakian, “Electrochemical determination of Levodopa in the presence of ascorbic acid by polyglycine/ZnO nanoparticles/Multiwalled carbon nanotube modified carbon paste electrode”, *Ionics*, 21 (2015) 2937-2947.
- 229-A. **Afkhami**, S. Aghajani, M. Mohseni, T. Madrakian, “Effectiveness of Ni_{0.5}Zn_{0.5}Fe₂O₄ for the removal and preconcentration of Cr(VI), Mo(VI), V(V) and W(VI) oxyanions from water and wastewater samples”, *J. Iran. Chem. Soc.*, 12 (2015) 2007-2013.
- 228-H. Bagheri, S. M. Arab, H. Khoshafar, **A. Afkhami**, “A novel sensor for sensitive determination of atropine based on a Co₃O₄-reduced grapheme oxide modified carbon paste electrode”, *New J. Chem.*, 39 (2015) 3875-3881.
- 227-T. Madrakian, H. Bagheri, **A. Afkhami**, “Spectrofluorometric and molecular modeling studies on binding of nitrite ion with bovine hemoglobin: Effect of nitrite ion on amino acid residue”, *J. Appl. Spectr.*, 82 (2015) 322-328.
- 226- S. Mahdavi, **A. Afkhami**, M. Jalali, ” Reducing leachability and bioavailability of soil heavy metals using modified and bare Al₂O₃ and ZnO nanoparticles”, *Environ. Earth. Sci.*, 73 (2015) 4347-4371.
- 225-S. Mahdavi, **A. Afkhami**, H. Merrikhpour, “Modified ZnO nanoparticles with new modifiers for the removal of heavy metals in water”, *Clean Technol. Environ. Policy*, 17 (2015) 1645-1661.

- 224- H. Bagheri, **A. Afkhami**, H. Khoshshafar, M. Rezaei, S.J. Sabounchei, M. Sarlakifar, “Simultaneous electrochemical sensing of thallium, lead and mercury using a novel ionic liquid/graphene modified electrode”, *Anal. Chim. Acta*, *870* (2015) 56–66.
- 223-H. Bagheri, **A. Afkhami**, P. Hashemi, M. Ghanei, “Simultaneous and sensitive determination of melatonin and dopamine with Fe₃O₄ nanoparticle decorated reduced graphene oxide modified electrode”, *RSC Adv.*, *5* (2015) 21659–21669.
- 222-**A. Afkhami**, F. Gomar, T. Madrakian, “Electrochemical sensor for Dapsone using molecularly imprinted polypyrrole membrane as a recognition element”, *J. Electrochem. Soc.* *162* (2015) B109-B113.
- 221-T. Madrakian, E. Haghshenas, M. Ahmadi, **A. Afkhami**, “Construction a magneto carbon paste electrode using synthesized molecularly imprinted magnetic nanospheres for selective and sensitive determination of mefenamic acid in some real samples”, *Biosens. Bioelectron.*, *68* (2015) 712–718.
- 220-A. Shirzadmehr, **A. Afkhami**, T. Madrakian, “A new nano-composite potentiometric sensor containing an Hg²⁺-ion imprinted polymer for the trace determination of mercury ions in different matrices”, *Mol. Liq.* , *204* (2015) 227–235.
- 219- R. Moosavi, **A. Afkhami**, T. Madrakian, “Simple cyanide sensing probe based on Ag/Fe₃O₄ nanoparticles”, *RSC Adv.*, *5* (2015) 15886–15891.
- 218- M. Ahmadi, T. Madrakian, **A. Afkhami**, “Chiral magnetic nanospheres resonance light scattering properties studies for selective determination of naproxen and phenylglycine enantiomers”, *Sens. Actuators B*, *210* (2015) 439-445.

- 217- T. Madrakian, M. Soleimani, **A. Afkhami**, “Electrochemical determination of fluvoxamine on mercurynanoparticle multi-walled carbon nanotube modified glassy carbon electrode”, *Sens. Actuators B*, *210* (2015) 259–266.
- 215- H. Keypour, M. H. Zebarjadian, M. Rezaeivala, **A. Afkhami**, “Competitive ^7Li NMR study of the stoichiometry, stability and thermodynamic data for the complexation of Li^+ , Mn^{2+} , Zn^{2+} and Cd^{2+} ions with two asymmetrical branched pentadentate (N_5) amines containing pyridine moiety in ionic liquid–acetonitrile mixtures”, *Mol. Liq.*, *1075* (2014) 525-533.
- 214- T. Madrakian, B. Zadpour, M. Ahmadi, **A. Afkhami**, “Selective extraction and sensitive determination of mercury (II) ions by flame atomic absorption spectrometry after preconcentration on an ion-imprinted polymer-coated maghemite nanoparticles”, *J. Iran. Chem. Soc.*, *12* (2015) 1235-1243.
- 213- T. Madrakian, R. Haryani, M. Ahmadi, **A. Afkhami**, “Spectrofluorometric determination of venlafaxine in biological samples after selective extraction on the superparamagnetic surface molecularly imprinted nanoparticles, *Anal. Methods*, *7* (2015) 428-435.
- 212- M. Ahmadi, T. Madrakian, **A. Afkhami**, “Enantioselective solid phase extraction prior to spectrofluorometric determination: a procedure for the determination of naproxen enantiomers in the presence of each other”, *RSC Adv.*, *5* (2015) 5450-5457.
- 211- M. Ahmadi, T. Madrakian, **A. Afkhami**, “Solid phase extraction of doxorubicin using molecularly imprinted polymer coated magnetite nanospheres prior to its spectrofluorometric determination”, *New J. Chem.*, *39* (2015) 163-171.
- 210- H. Bagheri, T. Madrakian, **A. Afkhami**, “Investigation of the interaction between nitrite ion and bovine serum albumin using spectroscopic and molecular docking techniques,” *J. Chin. Chem. Soc.*, *61* (2014) 1223-1230.

- 209-T. Madrakian, **A. Afkhami**, B. Zadpour, M. Ahmadi, “New synthetic mercaptoethylamino homopolymer-modified maghemite nanoparticles for effective removal of some heavy metal ions from aqueous solution”, *J. Ind. Eng. Chem.*, *21* (2015) 1160–1166.
- 208-T. Madrakian, **A. Afkhami**, R. Haryana, M. Ahmadi, “Synthesis of γ -Fe₂O₃/TiO₂ nanocomposite and its application in removal of dyes from water samples by adsorption and degradation processes, *RSC Adv.*, *4* (2014) 44841–44847.
- 207- M. Ahmadi, T. Madrakian, **A. Afkhami**, “Molecularly imprinted polymer coated magnetite nanoparticles as an efficient mefenamic acid resonance light scattering nanosensor”, *Anal. Chim. Acta*, *852* (2014) 250–256.
- 206-**A. Afkhami**, A. Shirzadmehr, T. Madrakian, H. Bagheri, “Improvement in the performance of a Pb²⁺ selective potentiometric sensor using modified core/shell SiO₂/Fe₃O₄ nano-structure”, *J. Mol. Liq.*, *199* (2014) 108–114.
- 205-T. Madrakian, H. Bagheri, **A. Afkhami**, M. Soleimani, “Spectroscopic and molecular docking techniques study of the interaction between oxymetholone and human serum albumin”, *J. Lumin.*, *155* (2014) 218–225.
- 204- **A. Afkhami**, A. Shirzadmehr, T. Madrakian, H. Bagheri, “New nano-composite potentiometric sensor composed of graphene nanosheets / thionine / molecular wire for nanomolar detection of silver ion in various real samples”, *Talanta*, *131* (2015) 548-555.
- 203-F. Tadayon, A. Katebi, **A. Afkhami**, Y. Panahi, H. Bagheri, “A new potentiometric sensor based on a high-performance composite for nanomolar determination of mercury (II) in environmental samples”, *Int. J. Environ. Anal. Chem.*, *94* (2014) 901-915.
- 202-**A. Afkhami**, H. Khoshsafar, H. Bagheri, T. Madrakian, “Facile simultaneous electrochemical determination of codeine and acetaminophen in pharmaceutical

samples and biological fluids by graphene-CoFe₂O₄ nanocomposite modified carbon paste electrode”, *Sens. Actuators B*, *203* (2014) 909–918.

201-A. **Afkhami**, S. Sayari, F. Soltani-Felehgari, T. Madrakian, “Ni_{0.5}Zn_{0.5}Fe₂O₄ nanocomposite modified carbon paste electrode for highly sensitive and selective simultaneous electrochemical determination of trace amounts of mercury (II) and cadmium (II)”, *J. Iran. Chem. Soc.*, *12* (2015) 257-265.

200-T. Madrakian, M. Soleimani, **A. Afkhami**, “Simultaneous determination of mycophenolate mofetil and its active metabolite, mycophenolic acid, by differential pulse voltammetry using multi-walled carbon nanotubes modified glassy carbon electrode”, *Mater. Sci. Eng. C*, *42* (2014) 38-45.

199-T. Madrakian, H. Bagheri, **A. Afkhami**, A. Chehregani Rad, “Direct electrochemical reaction of phytohemagglutinin adsorbed at the multi-walled carbon nanotubes modified glassy carbon electrode”, *J. Electrochem. Soc.*, *161* (2014) G37-G42.

198-H. Bagheri, **A. Afkhami**, A. Shirzadmehr, H. Khoshshafar, “A new nanocomposite modified carbon paste electrode as a high performance potentiometric sensor for nanomolar Tl(I) determination”, *J. Mol. Liq.*, *197* (2014) 52–57.

197-A. **Afkhami**, H. Khoshshafar, H. Bagheri, T. Madrakian, “Preparation of NiFe₂O₄/graphene nanocomposite and its application as a modifier for the fabrication of an electrochemical sensor for the simultaneous determination of tramadol and acetaminophen”, *Anal. Chim. Acta* *831* (2014) 50-59.

196-S. Mahdavi, M. Jalali, **A. Afkhami**, "Heavy metals Removal from aqueous solutions by Al₂O₃ nanoparticles modified with natural and chemical modifiers", *Clean Technol. Environ. Policy*, *17* (2015) 85-102.

195- **A. Afkhami**, S. Sayari, R. Moosavi, T. Madrakian, “Magnetic nickel zinc ferrite nanocomposite as an efficient adsorbent for the removal of organic dyes from aqueous solutions”, *J. Ind. Eng. Chem.*, *21* (2015) 920-924.

- 194-T. Madrakian, **A. Afkhami**, N. Rezvani-Jalal, M. Ahmadi, “Kinetic and thermodynamic studies of the adsorption of several anionic dyes from water samples on magnetite-modified multi-walled carbon nanotubes”, *Sep. Sci. Technol.*, 48 (2013) 2638-3648.
- 193-**A. Afkhami**, F. Soltani-Felehgari, T. Madrakian, “A sensitive electrochemical sensor for rapid determination of methadone in biological fluids using carbon paste electrode modified with gold nanofilm”, *Talanta* 128 (2014) 203-210.
- 192-**A. Afkhami**, F. Soltani-Felehgari, T. Madrakian, “Highly sensitive and selective determination of thiocyanate using gold nanoparticles surface decorated multi-walled carbon nanotubes modified carbon paste electrode”, *Sens. Actuators B*, 196 (2014) 467–474.
- 191- **A. Afkhami**, R. Moosavi, T. Madrakian, H. Keypour, A. Ramezani-Aktij, M. Mirzaei-Monsef, "Construction and application of an electrochemical sensor for simultaneous determination of Cd(II), Cu(II) and Hg(II) in water and foodstuff samples", *Electroanalysis*, 26 (2014) 786-795.
- 190-**A. Afkhami**, A. Shirzadmehr, T. Madrakian, “Improvement in performance of a hyoscine butylbromide potentiometric sensor using a new nano-composite carbon paste; a comparison study with polymeric membrane sensor”, *Ionics*, 20 (2014) 1145–1154.
- 189-H. Bagheri, **A. Afkhami**, Y. Panahi, H. Khoshsafar, A. Shirzadmehr, “Facile stripping voltammetric determination of haloperidol using a high performance magnetite/carbon nanotube paste electrode in pharmaceutical and biological samples”, *Mater. Sci. Eng. C*, 37 (2014) 264–270.
- 188- **A. Afkhami**, H. Khoshsafar, T. Madrakian, A. Shirzadmehr, “A new nano-composite electrode as a copper (II) selective potentiometric sensor”, *J. Iran Chem. Soc.*, 11 (2014) 1373-1380.

- 187- **A. Afkhami**, H. Ghaedi, T. Madrakian, D. Nematollahi, B. Mokhtari, “Electro-oxidation and voltammetric determination of oxymetholone in the presence of mestanolone using glassy carbon electrode modified with carbon nanotubes”, *Talanta* *121* (2014) 1-8.
- 186-T. Madrakian, E. Haghshenas, **A. Afkhami**, “Simultaneous determination of tyrosine, acetaminophen and ascorbic acid using gold nanoparticles/multiwalled carbon nanotube/glassy carbon electrode by differential pulse voltammetric method”, *Sens. Actuators B* *193* (2014) 451–460.
- 185-M. Bahram, F. Hoseinzadeh, K. Farhadi, M. Saadat, P. Najafi-Moghaddam, **A. Afkhami**, “Synthesis of gold nanoparticles using pH- sensitive hydrogel and its application for colorimetric determination of acetaminophen, ascorbic acid and folic acid”, *Colloid. Surface. A*, *441* (2014) 517–524.
- 184- **A. Afkhami**, H. Khoshshafar, H. Bagheri, T. Madrakian, “Construction of a carbon ionic liquid paste electrode based on multi-walled carbon nanotubes–synthesized Schiff base composite for trace electrochemical detection of cadmium”, *Mater. Sci. Eng. C*, *35* (2014) 8-14.
- 183- **A. Afkhami**, H. Khoshshafar, H. Keypour, H. Zeynali, T. Madrakian, “Novel sensor fabrication for the determination of nanomolar concentrations of Hg²⁺ in some foods and water samples based on multi-walled carbonnanotubes/ionic liquid and a new Schiff base”, *Food Anal. Method.*, *7* (2014) 1204-1212.
- 182-**A. Afkhami**, R. Moosavi, T. Madrakian, “Maghemite-nanoparticles enhanced effects in electrochemical determination of dipyrindamole utilizing simultaneous statistical based experimental design optimization”, *J. Electrochem. Soc.*, *160* (2013) H775-H781.
- 181- A. Khazaei, S. Saednia, M. Kiani Borazjani, J. Saien, M. Kiani, **A. Afkhami**, “A novel covalent functionalisation of poly (styrene-alt-maleic anhydride) with 4-aminobenzo-9-crown-3 ether”, *Supramol. Chem.*, *26* (2014) 88-93.

- 180-T. Madrakian, **A. Afkhami**, N. Rezvani-Jalal, M. Ahmadi, "Removal and preconcentration of lead(II), cadmium(II) and chromium(III) ions from wastewater samples using surface functionalized magnetite nanoparticles", *J. Iran. Chem. Soc.*, *11* (2014) 489-498.
- 179- **A. Afkhami**, F. Soltani-Felehgari, T. Madrakian, H. Ghaedi, "Surface decoration of multi-walled carbon nanotubes modified carbon paste electrode with gold nanoparticles for electro-oxidation and sensitive determination of nitrite", *Biosense. Bioelectron.*, *51* (2014) 379-385.
- 178-T. Madrakian, M. Ahmadi, **A. Afkhami**, M. Soleimani, "Selective solid-phase extraction of naproxen drug from human urine samples using molecularly imprinted polymer-coated magnetic multi-walled carbon nanotubes prior to its spectrofluorometric determination", *Analyst*, *138* (2013) 4542-4549.
- 177-H. Bagheri, **A. Afkhami**, H. Khoshshafar, M. Rezaei, A. Shirzadmehr, "Simultaneous electrochemical determination of heavy metals using a triphenylphosphine/MWCNTs composite carbon ionic liquid electrode", *Sens. Actuators B*, *186* (2013) 451-460.
- 176- T. Madrakian, **A. Afkhami**, M. Rahimi, M. Ahmadi, M. Soleimani, "Preconcentration and spectrophotometric determination of oxymetholone in the presence of its main metabolite (mestanolone) using modified maghemite nanoparticles in urine sample", *Talanta*, *115* (2013) 468-473.
- 175- A. Khazaei, M. Kazem-Rostami, A. Zare, A. R. Moosavi-Zare, M. Sadeghpour, **A. Afkhami**, "Synthesis, characterization, and application of a triazene-based polysulfone as a dye adsorbent", *J. Appl. Polym. Sci.*, *129*(2013) 3439-3446.
- 174- **A. Afkhami**, F. Soltani-Felehgari, T. Madrakian, "Gold nanoparticles modified carbon paste electrode as an efficient electrochemical sensor for rapid and sensitive determination of cefixime in urine and pharmaceutical samples", *Electrochim. Acta*, *103* (2013) 125-133.

- 173- **A. Afkhami**, F. Soltani-Felehgari, T. Madrakian, H. Ghaedi, M. Rezaeivala, “Fabrication and application of a new modified electrochemical sensor using nano-silica and a newly synthesized Schiff base for simultaneous determination of Cd²⁺, Cu²⁺ and Hg²⁺ ions in water and some foodstuff samples”, *Anal. Chim. Acta*, *771* (2013) 21– 30.
- 172-T. Madrakian, **A. Afkhami**, H. Mahmood-Kashani, M. Ahmadi, Superparamagnetic surface molecularly imprinted nanoparticles for sensitive solid-phase extraction of tramadol from urine samples, *Talanta*, *105* (2013) 255–261.
- 171-**A. Afkhami**, H. Ghaedi, T. Madrakian, M. Ahmadi, H. Mahmood-Kashan, “Fabrication of a new electrochemical sensor based on a new nano-molecularly imprinted polymer for highly selective and sensitive determination of tramadol in human urine samples”, *Biosens. Bioelectron.*, *44* (2013)34-40.
- 170-**A. Afkhami**, H. Ghaedi, T. Madrakian, M. Rezaeivala, “Highly sensitive simultaneous electrochemical determination of trace amounts of Pb(II) and Cd(II) using a carbon paste electrode modified with multi-walled carbon nanotubes and a newly synthesized Schiff base”, *Electrochim. Acta*, *89* (2013) 377-386.
- 169-T. Madrakian, **A. Afkhami**, H. Mahmood-Kashani, M. Ahmadi, Adsorption of some cationic and anionic dyes on magnetite nanoparticles-modified activated carbon from aqueous solutions: equilibrium and kinetics study, *J. Iran Chem. Soc.*, *10* (2013)481-489.
- 168-T. Madrakian, **A. Afkhami**, M. Ahmadi, “Adsorption and kinetic studies of seven different organic dyes onto magnetite nanoparticles loaded tea waste and removal of them from wastewater samples”, *Spectrochim. Acta Part A*, *99* (2012) 102-109.
- 167-T. Madrakian, **A. Afkhami**, M. Ahmadi, “Simple *in situ* functionalizing magnetite nanoparticles by reactive blue-19 and their application to the effective removal of Pb²⁺ ions from water samples”, *Chemosphere*, *90* (2013) 542–547.

- 166-**A. Afkhami**, H. Bagheri, H. Khoshshafar, M. Saber-Tehrani, M. Tabatabaee, A. Shirzadmehr, “Simultaneous trace-levels determination of Hg(II) and Pb(II) ions in various samples using a modified carbon paste electrode based on multi-walled carbon nanotubes and a new synthesized Schiff base”, *Anal. Chim. Acta*, *746* (2012) 98– 106.
- 165- **A. Afkhami**, T. Madrakian, A. Shirzadmehr, M. Tabatabaee, H. Bagheri, “New Schiff base-carbon nanotube- nanosilica- ionic liquid as a high performance sensing material of a potentiometric sensor for nanomolar determination of cerium (III) ions”, *Sens. Actuators B*, *174* (2012) 237– 244.
- 164-**A. Afkhami**, H. Bagheri, A. Shirzadmehr, H. Khoshshafar, P. Hashemi, “A potentiometric sensor for Cd²⁺ based on carbon nanotube paste electrode constructed from room temperature ionic liquid, ionophore and silica nanoparticles”, *Electroanalysis*, *24* (2012) 2176-2175.
- 163-**A. Afkhami**, F. Khajavi, “A diffusion-kinetic model for optical sensors to predict heterogeneous rate constants, diffusion coefficients and Stokes radii of ions with the aid of chemometric”, *Sens. Actuators B*, *173* (2012) 620-629.
- 162- T. Madrakian, **A. Afkhami**, M. A. Zolfigol, M. Ahmadi, N. Koukabi, “Application of modified silica coated magnetite nanoparticles for removal of iodine from water samples”, *Nano-Micro Lett.*, *4* (2012) 57-63.
- 161- S. Mahdavi, M. Jalali, **A. Afkhami**, “Heavy metals removal from aqueous solutions using TiO₂, MgO, and Al₂O₃ nanoparticles”, *Chem. Eng. Commun.*, *200* (2013) 448-470.
- 160- M. Abbasi-Tarighat, **A. Afkhami**, “Simultaneous spectrophotometric determination of Cu(II), Co(II) and Ni(II) in some plant foodstuff and environmental samples using ratio spectra-continuous wavelet transformation” *J. Braz. Chem. Soc.*, *23* (2012) 1312-1319.

- 159- E. Olyaie, H. Banejad, **A. Afkhami**, A. Rahmani, J. Khodaveisi, "Development of a cost-effective technique to remove the arsenic contamination from aqueous solutions by calcium peroxide nanoparticles", *Sep. Purif. Technol.*, *95* (2012) 10-15.
- 158- H. Bagheri, **A. Afkhami**, M. Saber-Tehrani, A. Shirzadmehr, S. W. Husain, H. Khoshshafar, M. Tabatabaee, "Novel sensor fabrication for the determination of nanomolar concentrations of Ce^{3+} in aqueous solutions", *Anal. Methods*, *4* (2012) 1753-1758.
- 157- H. Bagheri, **A. Afkhami**, M. Saber-Tehrani, H. Khoshshafar, "Preparation and characterization of magnetic nanocomposite of Schiff base/silica/magnetite as a preconcentration phase for the trace determination of heavy metal ions in water, food and biological samples using atomic absorption spectrometry", *Talanta*, *97* (2012) 87-95.
- 156-S. Mahdavi, M. Jalali, **A. Afkhami**, "Removal of heavy metals from aqueous solutions using Fe_3O_4 , ZnO, and CuO nanoparticles", *J. Nanopart. Res.*, *14* (2012) art. no. 846.
- 155-H. Bagheri, **A. Afkhami**, A. Shirzadmehr, H. Khoshshafar, H. Khoshshafar, H. Ghaedi, Novel potentiometric sensor for the determination of Cd^{2+} based on a new nano-composite, *Int. J. Environ. Anal. Chem.*, *93* (2013) 578-591.
- 154-**A. Afkhami**, T. Madrakian, A. Shirzadmehr, H. Bagheri, M. Tabatabaee, "A selective sensor for nano level detection of lead (II) in hazardous wastes using ionic-liquid/Schiff base/MWCNTs/nanosilica as a highly sensitive composite", *Ionics*, *18* (2012) 881-889.
- 153-T. Madrakian, A. Afkhami, M. Rahimi, "Removal, preconcentration and spectrophotometric determination of U(VI) from water samples using modified maghemite nanoparticles", *J. Radioanal. Nucl. Chem.*, *292* (2012) 597-602.

- 152-**A. Afkhami**, T. Madrakian, H. Ghaedi, H. Khanmohammadi, "Construction of a chemically modified electrode for the selective determination of nitrite and nitrate ions based on a new nanocomposite", *Electrochim. Acta*, *66* (2012) 255-264.
- 151-**A. Afkhami**, H. Ghaedi, "Multiwalled carbon nanotube paste electrode as an easy, inexpensive and highly selective sensor for voltammetric determination of Risperidone, *Anal. Methods*, *4* (2012) 1415-1420.
- 150-M. J. Zare Sakhvidi, A. R. Bahrami, **A. Afkhami**, A. Rafiei, "Development of diffusive solid phase microextraction method for sampling of epichlorohydrin in air", *Int. J. Environ. Anal. Chem.*, *92* (2012) 1365-1377.
- 149-**A. Afkhami**, T. Madrakian, S. B. Aleseyyed, "Kinetic determination of trace amounts of nitrite using an optical chemical sensor", *Clean- Solil Air Water*, *40* (2012) 619-623.
- 148- **A. Afkhami**, T. Madrakian, S. J. Sabounchei, M. Rezaei, S. Samiee, M. Pourshahbaz, "Construction of a modified carbon paste electrode for the highly selective simultaneous electrochemical determination of trace amounts of mercury (II) and cadmium (II)", *Sens. Actuators B* *161* (2012) 542– 548.
- 147-**A. Afkhami**, H. Bagheri, "Preconcentration of trace amounts of formaldehyde from water, biological and food samples using an efficient nano-solid phase, and its determination by a novel kinetic method", *Microchim. Acta* *176* (2012) 217-227.
- 146-T. Madrakian, **A. Afkhami**, M. Ahmadi, H. Bagheri, "Removal of some cationic dyes from aqueous solutions using magnetic-modified multi-walled carbon nanotubes" *J. Hazard. Mater.*, *196* (2011) 109-114.
- 145- T. Madrakian, **A. Afkhami**, F. Hojati, "Spectrophotometric study of the reaction between 2,3-dichloro-5,6-dicyano-p-benzoquinone as an acceptor with morpholine in some non-aqueous solvents", *Phys. Chem. Liq.*, *49* (2011) 172-180.

- 144-M. Shishebor, **A. Afkhami**, H. Bagheri, “Salicylic acid functionalized silica-coated magnetite nanoparticles for solid phase extraction and preconcentration of some heavy metal ions from various real samples”, *Chem. Cent. J.*, 5 (2011) 41.
- 143-A. **Afkhami**, H. Bagheri, T. Madrakian, Alumina nanoparticles grafted with functional groups as a new adsorbent in efficient removal of formaldehyde from water samples, *Desalination*, 281 (2011) 151–158.
- 142-J. Khodaveisi, H. Banejad, **A. Afkhami**, E. Olyaie, S. Lashgari, R. Dashti, “Synthesis of Calcium Peroxide Nanoparticles as an Innovative Reagent for In Situ Chemical Oxidation”, *J. Hazard. Mater.*, 192 (2011) 1437– 1440.
- 141- **A. Afkhami**, F. Khajavi, “Effect of β -Cyclodextrin, Surfactants and Solvent on the Reactions of the Recently Synthesized Schiff Base and Its Cu(II) Complex with Cyanide Ions”, *J. Mol. Liq.* 163 (2011) 20–26.
- 140- **A. Afkhami**, T. Madrakian, R. Ahmadi, H. Bagheri, M. Tabatabaee, Chemically modified alumina nanoparticles for selective solid phase extraction and preconcentration of trace amounts of Cd(II), *Microchim. Acta*, 175 (2011) 69–77.
- 139-A. **Afkhami**, H. Keypour, F. Khajavi, M. Rezaeivala, “Spectrophotometric and spectrofluorimetric investigation of different equilibria of a recently synthesized Schiff base with the aid of chemometric methods”, *J. Lumin.*, 131 (2011) 1472-1478.
- 138-T. Madrakian, **A. Afkhami**, R. Siri, M. Mohammadnejad, “Micelle mediated extraction and simultaneous spectrophotometric determination of vanadium(V) and molybdenum(VI) in plant foodstuff samples”, *Food Chem.*, 127 (2011) 769-773.
- 137-A. **Afkhami**, T. Madrakian, H. Keypour, S. Soltanbeygi, F. Khajavi, M. Rezaeivala, “Spectrophotometric determination of the formation constants of some transition metal cations with a new synthetic Schiff base in

dichloromethane and chloroform using rank annihilation factor analysis”, *J. Mol. Struct.*, 985 (2011) 86–90.

136-A. **Afkhami**, M. Saber-Tehrani, H. Bagheri, T. Madrakian, “Flame atomic absorption spectrometric determination of trace amounts of Pb(II) and Cr(III) in biological, food and environmental samples after preconcentration by modified nano alumina”, *Microchim. Acta*, 172 (2011) 125-136.

135- **A. Afkhami**, D. Nematollahi, T. Madrakian and M. Hajihadi, “Spectrophotometric determination of cationic surfactants based on their effect on the complexes of Chrome Azurol S with Be²⁺ and Al³⁺ cations”, *Clean-Solil Air Water*, 39 (2011) 171-176.

134-A. **Afkhami**, H. Keypour, F. Khajavi, M. Rezaeivala, “Application of Rank Annihilation Factor Analysis to the Spectrophotometric Determination of the Formation Constants of Complexes of a New Schiff base and Some Transition Metals in Different Media”, *J. Chem. Eng. Data*, 55 (2010) 4725-4731.

133-A. **Afkhami**, M. Saber-Tehrani, H. Bagheri, “Modified maghemite nanoparticles as an efficient adsorbent for removing some cationic dyes from aqueous solution”, *Desalination*, 263 (2010) 240-248.

132-A. **Afkhami**, R. Moosavi, T. Madrakian, “Preconcentration and spectrophotometric determination of low concentrations of malachite green and leuco-malachite green in water samples by high performance solid phase extraction using maghemite nanoparticles”, *Talanta*, 82 (2010) 785–789.

131- **A. Afkhami**, M. Saber-Tehrani, H. Bagheri, Simultaneous removal of heavy metal ions in wastewater samples using nano alumina modified with 2,4-dinitrophenylhydrazine, *J. Hazard. Mater.*, 181 (2010) 836–844.

- 130-M. Torabbeigi, T. Madrakian, **A. Afkhami**, "Kinetic study of charge transfer complexes of ICl₃ with DB18C6 and DC18C6 in some nonaqueous solvents, *J. Incl. Phenom. Macrocycl. Chem.*, *67* (2010) 127-132.
- 129-A. R. Rahmani, M. Zarrabi, M. R. Samarghandi, **A. Afkhami**, H. R. Ghaffari, "Degradation of Azo Dye Reactive Black 5 and Acid Orange 7 by Fenton-Like Mechanism" *Iran. J. Chem. Eng.*, *7* (2010) 87-94.
- 128- T. Madrakian, **A. Afkhami** and M. Mohammadnejad, "Application of Organized Media for Rapid Spectrofluorimetric Determination of Trace Amounts of Cr(VI) in the Presence of Cr(III)", *Bull. Korean Chem. Soc.*, *30* (2009) 1252-1256.
- 127- **A. Afkhami**, R. Moosavi, "Adsorptive Removal of Congo Red, a Carcinogenic textile dye, from aqueous solutions by Maghemite Nanoparticles", *J. Hazard. Mater.*, *174* (2010) 398-403.
- 126- H. A. Malmir, A. Mostajeran, A. Almodares, G. Asghari, A. Afkhami, H. Nassiry-Hachellu, The Effects of Aluminum on Fiber and Protein Bound Condensed Tannin, Polyphenols and some Growth Index in Two Sorghum Cultivars, *Int. J. Bot.*, *5* (2009) 58-66.
- 125- **A. Afkhami**, F. Khajavi, H. Khanmohammadi, "Investigation of Oxidation and Tautomerization of a Recently Synthesized Schiff Base in Micellar Media Using Multivariate Curve Resolution Alternative Least Squares and Rank Annihilation Factor Analysis Methods", *Anal. Chim. Acta*, *647* (2009) 189-194.
- 124-T. Madrakian, **A. Afkhami**, M. Mohammadnejad, "Second-Order Advantage Applied to Simultaneous Spectrofluorimetric Determination of Paracetamol and Mefenamic Acid in Urine Samples", *Anal Chim. Acta*, *645* (2009) 25–29.
- 123-**A. Afkhami**, R. Norooz-Asl, "Removal, preconcentration and determination of Mo(VI) from water and wastewater samples using maghemite nanoparticles", *Colloid Surface A*, *346* (2009) 52–57.

- 122-T. Madrakian, **A. Afkhami**, M. Mohammadnejad, "Simultaneous Spectrofluorimetric Determination of Levodopa and Propranolol in Urine Using Feed-Forward Neural Networks Assisted by Principal Component Analysis", *Talanta*, 78 (2009) 1051-1055.
- 121-M. Bahram, K. Farhadi, **A. Afkhami**, D. Shokatynia, F. Arjmand, "Simultaneous Kinetic Spectrophotometric Determination of Cu(II), Co(II) and Ni(II) Using Partial Least Squares (PLS) Regression", *Cent. Eur. J. Chem.*, 7 (2009) 375-381.
- 120-A. **Afkhami**, R. Norooz-Asl," Cloud Point Extraction for the Spectrophotometric Determination of Phosphorus(V) in Water Samples", *J. Hazard. Mater.*, 167 (2009) 752-755.
- 119- **A. Afkhami**, F. Khajavi, H. Khanmohammadi, "Spectrophotometric Determination of Complex Formation Constants Between a New Schiff Base and Some Transition Metals by Rank Annihilation Factor Analysis", *J. Chem. Eng. Data*, 54 (2009) 866-870.
- 118-A. **Afkhami**, F. Khajavi, H. Khanmohammadi, "Spectrophotometric Determination of Acidity and Tautomeric Constants and Hydrogen Bonding Strength for a New Schiff Base Using Hard Modeling and Multivariate Curve Resolution Alternative Least Squares Methods", *Anal. Chim. Acta*, 634 (2009) 180-185.
- 117-A. **Afkhami**, D. Nematollahi, T. Madrakian, M. Abbasi-Tarighat and M. Hajihadi, "Simultaneous Spectrophotometric Determination of Binary Mixtures of Surfactants with Continuous Wavelet Transformation", *J. Hazard. Mater.*, 166 (2009) 770-775.
- 116-A. **Afkhami** and M. Abbasi-Tarighat, "Application of Continuous Wavelet Transformation to the Simultaneous Kinetic Determination of Binary Mixtures", *Talanta*, 78 (2009) 424-431.

- 115- **A. Afkhami**, R. Norooz-Asl, "Cloud Point Extraction and Spectrophotometric Determination of Sulfide in Water Samples Using Ethylene Blue Formation Reaction", *Sep. Sci. Technol.*, *44* (2009) 983-994.
- 114-**A. Afkhami**, M. Abbasi-Tarighat, H. Khanmohammadi, "Simultaneous Determination of Co^{2+} , Ni^{2+} , Cu^{2+} and Zn^{2+} Ions in Foodstuffs and Vegetables with a New Schiff Base Using Artificial Neural Networks", *Talanta* *77* (2009) 995-1001.
- 113-L. Khalafi, M. Rohani and **A. Afkhami**, "Acidity Constants of some Organic Acids in the Presence of β -Cyclodextrin in Binary Ethanol-Water mixtures by Rank Annihilation Factor Analysis", *J. Chem. Eng. Data*, *53* (2008) 2389-2392.
- 112-**A. Afkhami**, R. Norooz-Asl "Micelle-Mediated Extraction and Spectrophotometric Determination of Ammonia in Water Samples Utilizing Indophenol Dye Formation", *J. Braz. Chem. Soc.*, *19* (2008) 1546-1552.
- 111-M. Bahram, **A. Afkhami**, Recent Applications of Kinetic Methods in Multi-component Analysis, *J. Iran. Chem. Soc.*, *5* (2008) 352-366.
- 110-**A. Afkhami**, T. Madrakian and A. Amini, "Mo(VI) and W(VI) Removal from Water Samples by Acid Treated High Area Carbon Cloth", *Desalination*, *243* (2009) 258-264.
- 109-**A Afkhami**, M. Abbasi-Tarighat, M. Bahram, H. Abollahi, "A New Strategy for Solving Matrix Effect in Multivariate Calibration Standard Addition Data Using Combination of H-Point Curve Isolation and H-Point Standard Addition Methods", *Anal. Chim. Acta*, *613* (2008) 144-151.
- 108-**A. Afkhami** and M. Abbasi-Tarighat, "Comparative Determination of Phosphate and Silicate Using Molybdenum Blue by Radial Basis Function and Feed-forward Neural Networks Assisted by Principal Component Analysis", *Anal. Sci.*, *24* (2008) 779-783.

- 107-A. **Afkhami**, T. Madrakian and M. Abbasi-Tarighat, "Simultaneous Determination of Calcium, Magnesium and Zinc in Different Foodstuffs and Pharmaceutical Samples with Continuous Wavelet Transforms" *Food Chem.*, *109* (2008) 660–669.
- 106-A. **Afkhami**, M. Abbasi-Tarighat and M. Bahram, "Artificial Neural Networks for Determination of Enantiomeric Composition of α -Phenylglycine Using UV Spectra of Cyclodextrin Host-Guest Complexes. Comparison of Feed-Forward and Radial Basis Function Networks, *Talanta*, *75* (2008) 91-98.
- 105-A. **Afkhami**, L. Khalafi, "Spectrophotometric Investigation of the Effect of β -Cyclodextrin on the Intramolecular Cyclization Reaction of Catecholamines Using Rank Annihilation Factor Analysis", *Anal. Chim. Acta*, *599* (2007) 241-248.
- 104-A. **Afkhami**, T. Madrakian and L. Khalafi, "Flow Injection and Batch Spectrophotometric Determination of Ibuprofen Based on Its Competitive Complexation Reaction with Phenolphthalein- β -Cyclodextrin Inclusion Complex", *Anal. Lett.*, *40* (2007) 2317-2328.
- 103-A. **Afkhami**, L. Khalafi, "Investigation of the Effect of Inclusion of Eriochrome Black T with β -Cyclodextrin on Its Complexation Reaction with Ca^{2+} and Mg^{2+} Using Rank Annihilation Factor Analysis", *Supramol. Chem.*, *20* (2008) 579-586.
- 102-A. **Afkhami**, T. Madrakian, A. Amini and Z. Karimi, "Effect of the Impregnation of Carbon Cloth with Ethylenediaminetetraacetic Acid on Its Adsorption Capacity for the Adsorption of Several Metal Ions" *J. Hazard. Mater.*, *150* (2008) 408-412.
- 101-A. **Afkhami**, T. Madrakian, Z. Karimi and A. Amini, "Effect of treatment of carbon cloth with sodium hydroxide solution on its adsorption capacity for the adsorption of some cations", *Colloid Surface A*, *304* (2007) 36-40.

- 100-A. **Afkhami**, L. Khalafi, "Spectrophotometric Determination of the Stability Constant of the Inclusion Complexes of Some Cathechol Derivatives with β -Cyclodextrin Based on their Reaction with Iodate", *J. Chin. Chem. Soc.*, *54* (2007) 957-962.
- 99-A. **Afkhami**, T. Madrakian, H. Tahmasebi, H. Keypour, and H. Khanmohammadi, "Interaction of New Polyamine Ligand N,N,N',N'-Tetrakis(2 Salicylideneaminoethyl)Butane-1,4-Diamine with Iodine in Chloroform and Dichloromethane Solutions", *Phys. Chem. Liq.*, *46* (2008) 372-378.
- 98-A. **Afkhami**, L. Khalafi, "Application of Rank Annihilation Factor Analysis to the Determination of the Stability Constant of the Complex XL and Rate Constants for the Reaction of X and XL with the Reagent Z Using Kinetic Profiles", *Bull. Chem. Soc. Jpn.*, *80* (2007) 1542-1548.
- 97-T. Madrakian, **A. Afkhami**, R. Moein, M. Bahram, "Simultaneous Spectrophotometric Determination of Sn(II) and Sn(IV) by Mean Centering of Ratio Kinetic Profiles and Partial Least Squares Methods", *Talanta*, *72* (2007) 1847-1852.
- 96-A. **Afkhami** and N. Sarlak, "Design and Characteristics of a Sulfide and Sulfite Optode Bbased on Immobilization of Methyl Violet on a Triacetylcellulose Membrane", *Sens. Actuators, B*, *124* (2007) 285-289.
- 95-M. Bahram, T. Madrakian, E. Bozorgzadeh and **A. Afkhami**, "Micelle-Mediated Extraction for Simultaneous Spectrophotometric Determination of Aluminum and Beryllium Using Mean Centering of Ratio Spectra", *Talanta*, *72* (2007) 408-414.
- 94-D. Nematollahi, **A. Afkhami**, E. Tammari, T. Shariatmanesh, M. Hesari and M. Shojaeifard, "An Efficient Electrochemical Synthesis of Diamino-o-Benzoquinone: Mechanistic and Kinetic Evaluation of the Reaction of Azide Ion with o-Benzoquinone, *Chem. Comm.*, (2007) 162-164.

- 93-A. **Afkhami**, T. Madrakian, Z. Karimi, "The effect of acid treatment of carbon cloth on the adsorption of nitrite and nitrate ions", *J. Hazard. Mater.*, *144* (2007) 427-431.
- 92-M. Bahram, R. Bro, C. Stedmon and **A. Afkhami**, "Handling of Rayleigh and Raman scatter for PARAFAC modeling of fluorescence data using interpolation", *J. Chemom.*, *20* (2006) 99-105.
- 91-A. **Afkhami** and L. Khalafi, "Interaction of Beta-Cyclodextrin with Cetyltrimethylammonium Bromide in the Presence of Neutral Red and Its Application to the Spectrophotometric Determination of Beta-Cyclodextrin", *J. Chin. Chem. Soc.*, *54* (2007) 431-436.
- 90-A. **Afkhami**, T. Madrakian, L. Khalafi, "Spectrophotometric Determination of Fluoxetine by Batch and Flow Injection Methods," *Chem. Pharm. Bull.*, *54* (2006) 1642-1646.
- 89-A. **Afkhami**, N. Sarlak and A. R. Zarei, "Spectrophotometric Determination of Salicylamide and Paracetamol in Biological Samples and Pharmaceutical Formulations by a Differential Kinetic Method", *Acta Chim. Slov.*, *53* (2006) 357-362.
- 88-A. **Afkhami** and N. Sarlak, "A Novel Cyanide Sensing Phase Based on Immobilization of Methyl Violet on a Triacetylcellulose Membrane", *Sens. Actuators B*, *122* (2007) 437-441.
- 87-A. **Afkhami**, T. Madrakian, E. Bozorgzadeh and M. Bahram, "Spectrophotometric Determination of Beryllium in Water Samples after Micelle-Mediated Extraction Preconcentration", *Talanta*, *71* (2007) 1103-1109.
- 86-T. Madrakian, **A. Afkhami**, L. Khalafi and M. Mohammadnejad, "Spectrophotometric Determination of Catecholamines Based on Their Oxidation

Reaction Followed by Coupling with 4-Aminobenzoic Acid", *J. Braz. Chem. Soc.*, *17* (2006) 1259-1265.

85-A. **Afkhami**, N. Sarlak and A. R. Zarei, "Simultaneous Kinetic Spectrophotometric Determination of Cyanide and Thiocyanate Using the Partial Least Squares (PLS) Regression", *Talanta*, *71* (2007) 893-899.

84-A. **Afkhami**, T. Madrakian and H. Siampour, "Highly Selective Determination of Trace Quantities of Mercury in Water Samples after Preconcentration by Cloud Point Extraction Method", *Int. J. Environ. Anal. Chem.*, *86* (2006) 1165-1173.

83-T. Madrakian, **A. Afkhami** and A. Mousavi, "Spectrophotometric Determination of Trace Amounts of Uranium(VI) in Water Samples after Mixed Micelle-Mediated Extraction", *Talanta*, *71* (2007) 610-614.

82-A. **Afkhami** and A. R. Zarei, "Simultaneous Kinetic-Spectrophotometric Determination of Nb(V) and Ta(V) in Alloys Using the H-Point Standard Addition Method", *J. Chin. Chem. Soc.*, *53* (2006) 995-1003.

81-A. **Afkhami**, N. Sarlak, A. R. Zarei and T. Madrakian, "Simultaneous Kinetic Spectrophotometric Determination of Sulfite and Sulfide Using Partial Least Squares (PLS) Regression", *Bull. Korean Chem. Soc.*, *27* (2006) 863-868.

80-A. **Afkhami**, T. Madrakian and H. Siampour, Cloud Point Extraction Spectrophotometric Determination of Trace Quantities of Bismuth in Urine, *J. Braz. Chem. Soc.*, *17* (2006) 797-802.

79-A. **Afkhami** and L. Khalafi, "Rank Annihilation Factor Analysis for Spectrophotometric Determination of Acidity Constants of some Organic Compounds in the Presence of β -Cyclodextrin", *Anal. Chim. Acta*, *569* (2006) 267-274.

78-A. **Afkhami**, T. Madrakian and H. Siampour, "Flame Atomic Absorption Spectrometric Determination of Trace Quantities of Cadmium in Water Samples

after Cloud Point Extraction in Triton X-114 without Added Chelating Agents", *J. Hazard. Mater. B*, *138* (2006) 269–272.

77-A. **Afkhami** and M. Bahram, "Cloud Point Extraction Simultaneous Spectrophotometric Determination of Zn(II), Co(II) and Ni(II) in Water and Urine Samples by 1-(2-Pyridylazo)2-Naphthol using Partial Least Squares Regression, *Microchim. Acta*, *155* (2006) 403-408.

76- A. **Afkhami**, T. Madrakian and A. Abdolmaleki, "Kinetic-Spectrophotometric Determination of Sb(V) Based on its Reaction with Iodide in the Presence of Methylene Blue", *J. Anal. Chem.*, *61* (2006) 389-392.

75-A. **Afkhami**, T. Madrakian and A. Maleki, "Spectrophotometric Determination of Hydroxylamine and Nitrite in Mixture in Water and Biological Samples after Micell-Mediated Extraction", *Anal. Biochem.*, *347* (2005) 162-164.

74-A. **Afkhami**, T. Madrakian and A. Maleki, "Indirect Kinetic-Spectrophotometric Determination of Hydroxylamine Based on Its Reaction with Iodate", *Anal. Sci.*, *22* (2006) 329-331.

73-T. Madrakian, **A. Afkhami**, M. A. Zolfigol and M. Solgi, Separation, preconcentration and determination of silver ion from water samples using silica gel modified with 2,4,6-trimorpholino-1,3,5-triazin, *J. Hazard. Mater.*, *128* (2006) 67-72.

72-A. **Afkhami** and M. Bahram, "A Novel Spectrophotometric Method for the Simultaneous Kinetic Analysis of Ternary Mixtures by Mean Centering of Ratio Kinetic Profiles", *Talanta*, *68* (2006) 1148-1155.

71-T. Madrakian, M. A. Zolfigol, **A. Afkhami** and S. Afshar, "Synthesis of Vulcanized Silica and Its Application to Removing Hg²⁺ and Pb²⁺ From Water Samples", *Asi. J. Chem.*, *17* (2005) 1941-1948.

- 70-A. **Afkhami**, T. Madrakian and M. Bahram, "Simultaneous Spectrophotometric Determination of Iodate and Bromate in Water Samples by the method of Mean Centering of Ratio Kinetic Profiles", *J. Hazard. Mater.*, B 123 (2005) 250-255.
- 69-A. **Afkhami**, D. Nematollahi, T. Madrakian and L. Khalafi, "Investigation of the Electrochemical Behavior of Some Catecholamines in the Presence of 4-Aminobenzoic Acid", *Electrochim. Acta*, 50 (2005) 5633-5640.
- 68-A. R. Zarei, **A. Afkhami** and N. Sarlak, " Simultaneous Spectrophotometric Determination of Paracetamol and Salicylamide in Human Serum and Pharmaceutical Formulations by a Differential Kinetic Method", *J. AOAC Int.*, 88 (2005) 1695-1701.
- 67-A. **Afkhami**, T. Madrakian and A. Abdolmaleki, "Sensitive Kinetic-Spectrophotometric Determination of Sb(III) Based on Its Inhibitory Effect on the Decolourization Reaction of Methyl Orange" *Croat. Chem. Acta*, 78 (2005) 569-574.
- 66-A. **Afkhami** and L. Khalafi, "Indirect Determination of Sulfide by Cold-Vapor Atomic Absorption Spectrometry", *Microchim. Acta*, 150 (2005) 43-46.
- 65- **A. Afkhami** and M. Bahram, "Mean Centering of Ratio Spectra as a New Spectrophotometric Method for the Analysis of Binary and Ternary Mixtures", *Talanta*, 66 (2005) 711-719.
- 64-A. **Afkhami** and N. Sarlak, "Simultaneous determination of salicylamide and paracetamol by spectrophotometric H-Point standard addition method", *Acta Chim. Slov.*, 52 (2005) 98-103.
- 63-T. Madrakian, **A. Afkhami**, M. Borazjani and M. Bahram, "Partial Least-Squares Regression for the Simultaneous Determination of Aluminum and Beryllium in Geochemical Samples Using Xylenol Orange, *Spectrochim. Acta Part A*, 61 (2005) 2988-2994.

- 62-A. **Afkhami**, M. Bahram, S. Gholami and Z. Zand, "Micell-Mediated Extraction for the Spectrophotometric Determination of Nitrite in Water and Biological Samples Based on Its Reaction with *p*-Nitroaniline in the Presence of Diphenylamine", *Anal. Biochem.*, *336* (2005) 295-299.
- 61-A. **Afkhami** and M. Bahram, "Mean Centering of Ratio Kinetic Profiles as a Novel Spectrophotometric Method for the Simultaneous Kinetic Analysis of Binary Mixtures", *Anal. Chim. Acta*, *526* (2004) 211-218.
- 60-A. **Afkhami** and A. R. Zarei, "Simultaneous Quantitative Kinetic Determination of Beryllium and Aluminium by Spectrophotometric H-Point Standard Addition Method", *Anal. Sci.*, *20* (2004) 1711-1715.
- 59- **A. Afkhami**, D. Nematollahi, L. Khalafi and M. Rafiee, "Kinetic Study of the Oxidation of some Catecholamines by Digital Simulation of Cyclic Voltammograms", *Int. J. Chem. Kinet.*, *37* (2005) 17-24.
- 58-T. Madrakian, **A. Afkhami**, M. Bahram and M. Borazjani, "Simultaneous Derivative Spectrophotometric Determination of Levodopa and Carbidopa in Pharmaceutical Preparations" *Bull. Korean Chem. Soc.*, *25* (2004) 1764-1768.
- 57-A. **Afkhami**, M. Bahram and A. R. Zarei, "Comparison of Partial Least Squares Regression and Absorbance Correction-H-Point Standard Addition Method for Simultaneous Spectrophotometric Determination of Zinc, Cobalt and Nickel by 1-(2-Pyridylazo)2-Naphthol in Micellar Media", *Microchim. Acta*, *148* (2004) 317-326.
- 56-A. **Afkhami** and M. Bahram, "Successive Ratio-Derivative Spectra as a New Spectrophotometric Method for the Analysis of Ternary Mixtures", *Spectrochim. Acta Part A*, *61* (2005) 869-877.
- 55-A. **Afkhami**, Sh. Masahi, and M. Bahram," Spectrophotometric Determination of Nitrite Based on Its Reaction with *p*-Nitroaniline in the Presence of

Diphenylamine in Micellar Media”, *Bull. Korean Chem. Soc.*, *25* (2004) 1009-1011.

54-A. **Afkhami** and A. R. Zarei, “Simultaneous Kinetic-Spectrophotometric Determination of Hydrazine and Acetylhydrazine in Micellar Media Using H-Point Standard Addition Method”, *Anal. Sci.*, *20* (2004) 1199-1203.

53-D. Nematollahi, **A. Afkhami**, F. Mosaed and M. Rafiee, “Investigation of the electro-oxidation and oxidation of catechol in the presence of sulfanilic acid”, *Res. Chem. Intermed.*, *30* (2004) 299-309.

52-A. **Afkhami** and A. R. Zarei, “Simultaneous Spectrophotometric Determination of Hydrazine and Phenylhydrazine Based on Their Condensation Reactions with Different Aromatic Aldehydes in Micellar Media Using H-Point Standard Addition Method”, *Talanta*, *62* (2004) 559-565.

51-A. **Afkhami** and F. Mosaed, “Sensitive Kinetic-Spectrophotometric Determination of Trace Amounts of Periodate Ion”, *J. Anal. Chem.*, *58* (2003) 588-593.

50-A. **Afkhami** and M. Bahram, “H-Point Standard Addition Method for Simultaneous Spectrophotometric Determination of Co(II) and Ni(II) by 1-(2-pyridylazo)2-naphthol in micellar media”, *Spectrochim. Acta Part A*, *60* (2004) 181-186.

49-A. **Afkhami** and A. Zarei, “Simultaneous Spectrophotometric determination of Bi(III) and Sb(III) Based on Their Complexes with Iodide in Acidic Media Using H-Point Standard Addition Method and First Derivative Spectrometry”, *Anal. Sci.*, *19* (2003) 917-921.

48-T. Madrakian, **A. Afkhami** and A. Esmaili, “Spectrophotometric Determination of Bismuth in Water Samples After Preconcentration of Its Thiourea-Bromide Ternary Complex on Activated Carbon”, *Talanta*, *60* (2003) 831-838.

- 47-**A. Afkhami**, “Adsorption and Electrosorption of Nitrate and Nitrite at High Area Carbon Cloth: An Approach to Purification of Water and Waste-Water Samples”, *Carbon*, 41 (2003) 1320-1321.
- 46-**A. Afkhami**, A. R. Zarei, “Kinetic-Spectrophotometric Determination of Rhodium(III) Based on Its Catalytic Effect on the Oxidation of Malachite Green with Periodate”, *Chem. Anal. (Warsaw)*, 48 (2003) 859-867.
- 45-**A. Afkhami**, A. R. Zarei, “Simultaneous Kinetic-Spectrophotometric Determination of Periodate-Bromate and Iodate-Bromate Mixtures Using H-Point Standard Addition Method”, *Talanta*, 60 (2003) 63-71.
- 44-**A. Afkhami**, H. A. Khatami, “Determination of Some Cathecholamines Based on Their Reaction with Periodate”, *J. Anal. Chem.*, 58 (2003) 135-138.
- 43-T. Madrakian, M. Shamsipur, **A. Afkhami**, “Extraction-Spectrophotometric Determination of Benzocaine by Dicyclohexyl-18-Crown-6 and Calmagite”, *J. Sci. I. R. Iran*, 13 (2002) 121-124.
- 42-M. A. Zolfigol, T. Madrakian, E. Ghaemi, **A. Afkhami**, S. Azizian, Sh. Afshar, “Synthesis of Morpholinated and 8-Hydroxyquinolinated Silica Gel and Their Application to Water Softening”, *Green Chem.*, 4 (2002) 611-614.
- 41-**A. Afkhami** B. E. Conway, “Investigation of Removal of Cr(VI), Mo(VI), W(V), V(IV) and V(V) Oxy-ions from Industrial Waste-Waters by Adsorption and Electrosorption at High-Area Carbon Cloth”, *J. Col. Int. Sci.*, 251 (2002) 248-255.
- 40-**A. Afkhami**, F. Mosaed, “Catalytic Spectrophotometric Determination of Trace Amounts of Oxalate by Methylene Blue-Dichromate Redox Reaction”, *Can. J. Anal. Sci. Spect.*, 47 (2002) 55-59.
- 39-**A. Afkhami**, T. Madrakian, “Kinetic-Spectrophotometric Determination of Selenium in Natural Water After Preconcentration of Elemental Selenium on Activated Carbon”, *Talanta*, 58 (2002) 311-317.

- 38-A. **Afkhami**, A. Nouri-Zadeh, "Sensitive-Spectrophotometric Determination of Methyl Dopa and Adrenaline", *Asian J. Chem.*, *14* (2002) 867-873.
- 37-A. **Afkhami**, F. Mosaed, "Sensitive Kinetic-Spectrophotometric Determination of Iodate in Iodized Table Salt Based on Its Accelerating Effect on the Reaction of Bromate with Chloride Ion in the Presence of Hydrazine", *Anal. Sci.*, *18* (2002) 667-670.
- 36-A. **Afkhami**, D. Nematollahi, H. A. Khatami, "Kinetic-Spectrophotometric Determination of L-Dopa, Methyldopa, Dopamine and Adrenaline", *Asian J. Chem.*, *14* (2002) 333-338.
- 35-A. **Afkhami**, T. Madrakian, A. R. Zarei, "Spectrophotometric Determination of Periodate, Iodate and Bromate Mixtures Based on Their Reaction with Iodide", *Anal. Sci.*, *17* (2001) 1199-1202.
- 34-A. **Afkhami** and H. A. Khatami, Indirect Kinetic-Spectrophotometric Determination of Resorcinol, Catechol and Hydroquinone, *J. Anal. Chem.*, *56* (2001) 429-432.
- 33-A. **Afkhami**, T. Madrakian, A. Afshar Assl, "Kinetic-Spectrophotometric Determination of Trace Amounts of As(III) Based on Its Inhibitory Effect on the Reaction Between Bromate and Hydrochloric Acid", *Talanta*, *55* (2001) 55-60.
- 32-A. **Afkhami**, T. Madrakian, A. Afshar Assl and A. Akbari Sehat, "Solid Phase Extraction Flame Atomic Absorption Spectrometric Determination of Ultra-Trace Amounts of Beryllium", *Anal. Chim. Acta.*, *437* (2001) 17-22.
- 31-J. Ghasemi, R. Amini and **A. Afkhami**, " Kinetic Spectrophotometric Determination of Thiocyanate Based on Its Inhibitory Effect on the Oxidation of Methyl Red by Bromate" *Anal. Sci.*, *17* (2001) 435-437.

- 30- **A. Afkhami** and A. Afshar Assl, "Sensitive Spectrophotometric Determination of Trace Quantities of Phenylhydrazine "Microchem. J., 69 (2001) 51-57.
- 29- **A. Afkhami** and A. R. Zarei, " Spectrophotometric Determination of Periodate and Iodate By a Differential Kinetic Method", Talanta, 53 (2001) 815-821.
- 28- **A. Afkhami** and F. Mosaed, "Kinetic Determination of Periodate Based on Its Reaction with Ferroin and Its Application to the indirect Determination of Ethylene Glycol and Glycerol", Microchem. J., 68 (2001) 35-40.
- 27- M. Hasani and **A. Afkhami**, "Conductometric Study of Complexation of Some Transition Metal Cations With 1,10-Phenanthroline, 2,2' Bipyridine and 8-Hydroxyquinoline in Acetonitrile Solution", Asian J. Chem., 12 (2000) 712-718.
- 26- **A. Afkhami** and A. Afshar-E-Asl, "Kinetic-Spectrophotometric Determination of Hydrazine by the Inhibition of Bromate - Hydrochloric Acid Reaction", Anal. Chim. Acta, 419 (2000) 101-106.
- 25- **A. Afkhami** and M. Rezaei, "Spectrophotometric Reaction - Rate Method Determination of Trace Amounts of Sulfite", Can. J. Anal. Sci. Spect., 45 (2000) 9-13.
- 24- D. Nematollahi, **A. Afkhami**, M. A. Zolfigol and N. Akaberi, "Electrochemical Iodination and Bromination of Dibenzoylmethane", Bull. Electrochem., 16 (2000) 89-91.
- 23- **A. Afkhami**, H. Parham and M. Rezaei, "Kinetic Spectrophotometric Determination of Acetaldehyde", Anal. Lett., 33 (2000) 527-538.
- 22- **A. Afkhami** and F. Mosaed, "Spectrophotometric Determination of Selenium Based on Catalytic Reaction of Methyl Violet with Sulfide" J. Anal. Chem., 54 (1999) 1123-1126.

- 21-A. **Afkhami** and M. Rezaei, "Sensitive Spectrophotometric Determination of Formaldehyde by the Inhibition of Malachite Green-Sulfite Reaction", *Microchem. J.*, *63* (1999) 243-249.
- 20-A. **Afkhami** and A. R. Zarei, "Simultaneous Determination of Binary Mixtures of Some Aromatic Aldehydes By First Derivative Spectrophotometry", *Orient. J. Chem.*, *15* (1999) 29-34.
- 19-A. **Afkhami** and F. Mosaed, "Kinetic-Spectrophotometric Determination of Traces Sulfide ", *Orien. J. Chem.*, *15* (1999) 61-64.
- 18-M. Shamsipur, E. Karkhaneei and A. **Afkhami**, " Lithium-7 NMR Study of the Exchange Kinetics of the Lithium Ion With Cryptand C222 in Methanol Solution. Temperature Dependence of the Exchange Mechanism", *J. Coord. Chem.*, *44* (1998) 23-32.
- 17-M. Shamsipur, E. Karkhaneei and A. **Afkhami**, " Lithium-7 NMR Study of the Exchange Kinetics of the Lithium Ion With Cryptand C221 in Methanol Solution. Temperature Dependence of the Exchange Mechanism", *Polyhedron*, *17* (1998) 3809-3815.
- 16-E.Karkhaneei, J. Zolgharnein, A. **Afkhami** and M. Shamsipur, "Lithium-7 and Sodium-23 NMR Studies of Complexation of Li and Na Ions with 1,13-Dibenzo-24-Crown-8 in Binary Nitromethane-Acetonitrile Mixtures", *J. Coord. Chem.*, *46* (1998) 1-11.
- 15-A. **Afkhami** and A. R. Zarei, "Sensitive Spectrophotometric Determination of Aromatic Aldehydes Based on Their Reaction with Diphenylamine", *Anal. Sci.*, *13* (1997) 497-499.
- 14-A. **Afkhami** and A. Mogharnesband, "Kinetic-Spectrophotometric Determination of Nitrite by the Reaction of Methyl Orange Formation", *J. Sci. I. R. Iran*, *8* (1997) 96-99.

- 13- **A. Afkhami** and F. Jalali, "Spectrophotometric Determination of Trace Amounts of Nitrite Ion Based on Its Catalytic Effect in the Reaction Between Thymol Blue and Bromate ", *Microchem. J.*, *57* (1997) 224-230.
- 12-T. Madrakian, **A. Afkhami**, J. Ghasemi and M. Shamsipur, "Lithium-7 and Sodium-23 NMR Studies of Complexation of Li^+ and Na^+ Ions with 1,10-Phenanthroline, 2,2'-Bipyridine and 8-Hydroxyquinoline in some Non aqueous Solutions", *Polyhedron*, *15* (1996) 3647-3652.
- 11-E. Karkhaneei, **A. Afkhami** and M. Shamsipur, "Nuclear Magnetic Resonance Studies of sodium Ion Complexes with Several Crown Ethers in Binary Acetonitrile-Dimethylsulfoxide Mixtures", *Polyhedron*, *15* (1996) 1989-1994.
- 10-E. Karkhaneei, **A. Afkhami** and M. Shamsipur, "Nuclear Magnetic Resonance Study of Lithium Ion Complexes with Several Crown Ethers in Binary Acetonitrile-Nitromethane Mixtures", *J. Coord. Chem.*, *39* (1996) 33-42.
- 9-**A. Afkhami** and H. Bahrami, "Catalytic- Spectrophotometric Determination of Manganese (II) by Catalysis of the Oxidation of Ferriin with Periodate", *Iran. J. Chem. & Chem. Eng.*, *14* (1995) 72-76.
- 8-**A. Afkhami** and H. Bahrami, "Kinetic- Spectrophotometric Determination of Trace Quantities of Thiocyanate by Inhibition of the Redox Reaction of Ferriin with Periodate", *Anal. Lett.*, *28*(1995) 1785-1791.
- 7-**A. Afkhami** and A. Mogharnesband, "Kinetic Spectrophotometric Determination of Trace Amounts of Nitrite Ion Using Its Reaction with Neutral Red", *Anal. Lett.*, *27*(1994) 991-1000.
- 6-A. Safavi and **A. Afkhami**, "Catalytic Spectrophotometric Determination of Selenium", *Anal. Lett.*, *28* (1995) 1095-1105.

- 5-A. Safavi, **A. Afkhami** and A. Massoumi, "Catalytic Determination of Trace Amounts of Tellurium (IV) Based on its Catalytic Effect in the Reduction of Bromate with Hydrazinium Dichloride", *Microchem. J.*, 52 (1995) 3-8.
- 4-A. **Afkhami**, A. Safavi and A. Massoumi, "Spectrophotometric Determination of Trace Amounts of Selenium with Catalytic Reduction of Bromate by Hydrazine in Hydrochloric Acid Media ", *Talanta*, 39 (1992) 993-996.
- 3-A. **Afkhami**, A. Safavi and A. Massoumi, "Catalytic Spectrophotometric Determination of an Ultra-Trace Amount of Lead by Reduction of Resazurin by Sodium Sulfide" *Anal. Lett.*, 24 (1991) 1643-1655.
- 2-A. Safavi, **A. Afkhami** and A. Massoumi, "Catalytic Effect of Selenium on the Sulfide Resazurin Reduction Reaction", *Iran. J. Sci. Technol.*, 15 (1991) 276-282.
- 1-A. Safavi, **A. Afkhami** and A. Massoumi, "Spectrophotometric Catalytic Determination of Ultra-Trace Amounts of Selenium Based on the Reduction of Resazurin by Sulfide" *Anal. Chim. Acta*, 232 (1990) 351-356.

Some Seminar Papers

1. A. Khazaei, M. Kazem-Rostami, **A. Afkhami**, S. Saednia, "Novel synthesis of poly 4-[(4'-aminobenzene) sulfonyl]benzenediazonium under solvent free condition and measurement of its ability for adsorbing pigments from water", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 910.
2. **A. Afkhami**, R. Moosavi, "Effective technique for successfully removal of methylene blue using SDS coated maghemite nanoparticles", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 468.
3. **A. Afkhami**, T. Madrakian, S. Siavashi, "Preconcentration of benzoic acid from aqueous solutions by maghemite nanoparticles", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 273.

4. **A. Afkhami**, T. Madrakian, S. J. Sabounchei, M. Rezaei, M. Pourshahbaz, "Investigation of electron donor-acceptor complex formation between nitro benzoyl diphenylmethylene phosphorane (NBDMP) with iodine in some solvents with rank annihilation factor analysis (RAFA)", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 270-271.
5. **A. Afkhami**, T. Madrakian, S. J. Sabounchei, M. Rezaei, M. Pourshahbaz, "Kinetic Spectrophotometric study of the reaction between a synthetic phosphoraneligand with 2,3 dichloro5,6-dicyanobezoquinonein some nonaqueous solvents", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 270.
6. **A. Afkhami**, A. Shirzadmehr, "A highly selective lead-sensitive electrodebased on a new nano-composite" 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p.263.
7. **A. Afkhami**, F. Soltani-Felegari, H. Khoshsafar, Construction of carbon paste electrode modified with multi-walled carbon nanotube for electrochemical determination of bopropion", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 249.
8. **A. Afkhami**, H. Ghaedi, "Voltammetric determination of nitrite and nitrate in mixture based on carbon paste electrode modified with azo-linked pyridazine-based ligands coated SiO₂@Fe₃O₄", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 217.
9. **A. Afkhami**, H. Khoshsafar, H. Bagheri, A. Shirzadmehr, F. Soltani-Felegari, "Simultaneous voltammetric determination of Cd (II) and Pb (II) based on carbon paste electrode modified with 3-(4-hydroxybenzylideneamino)-2-thioxothiazolidin-4-one and multiwalled carbon nanotubes", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 196.
10. T. Madrakian, A. Afkhami, M. Ahmadi, M. Mohammadnejad, "Preconcentration and spectrophotometric determination of amoxicillin with using modified magnetic-multi wall carbon nanotubes", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 135.

11. **A. Afkhami**, H. Khoshsafar, A. Shirzadmehr, H. Bagheri, "Mercury (II) carbon paste electrode based on multi-walled Carbon nanotubes-ionic liquid: application to mercury content determination in environmental samples", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 123.
12. **A. Afkhami**, T. Madrakian, M. Rezaei, "Kinetic Spectrophotometric study of the reaction between a synthetic phosphoraneligand with 2,3 dichloro5, 6-dicyanobezoquinonein some nonaqueous solvents", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 103.
13. **A. Afkhami**, A. Shirzadmehr ,H. Bagher, H. Khoshsafar, "Application of carbon-paste electrode modified with 3-(4-ethoxybenzylideneamino)-2-thioxothiazolidin-4-one supported on multiwalled carbon nanotube for determination of cadmium by differential pulse stripping voltammetry", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 53.
14. **A. Afkhami**, T. Madrakian, M. Rohani, "Effect of sodium dodecyl sulfate micellar media on the determination of nitrite based on its reaction with neutral red", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 10.
15. **A. Afkhami**, H. Bagheri, H. Khoshsafar, "Highly sensitive and selective catalytic spectrophotometric determination of cobalt based on oxidation of BCB by hydrogen peroxide", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 6.
16. **A. Afkhami**, E. Tammari, F. Khajavi, R. Azadbakht, E. Noroozpour, "Investigation of the effect of solvent, surfactant and β -cyclodextrin on the acidity constants of a recently synthesized Schiff base by spectrophotometry and spectrofluorimetry using rank annihilation factor analysis", 15th Iranian Chemistry Congress, 4-6 September 2011, Bu-Ali Sina University, Hamedan, Iran, Proceeding, p. 3.
17. T. Madrakian, **A. Afkhami**, M. Ahmadi, H. Bagheri, "Removal of some cationic dyes form aqueous solutions by using magnetite - modified multiwalled carbon nanotubes," 18th Iranian Seminar of Analytical Chemistry,

- 18-20 May 2011, Sistan and Baluchestan University, Zahedan, Iran, Proceeding, p. 390.
18. H. Bagheri, **A. Afkhami**, “Kinetic spectrophotometric determination of trace amounts of formaldehyde in real samples after nano-solid phase extraction”, 18th Iranian Seminar of Analytical Chemistry, 18-20 May 2011, Sistan and Baluchestan University, Zahedan, Iran, Proceeding, p. 271.
 19. H. Bagheri, **A. Afkhami**, T. Madrakian, M. Ahmadi, “Preconcentration of morphine from biological samples using multi-walled carbon nanotubes filled with Fe₃O₄ nanoparticles”, 18th Iranian Seminar of Analytical Chemistry, 18-20 May 2011, Sistan and Baluchestan University, Zahedan, Iran, Proceeding, p. 269.
 20. H. Bagheri, **A. Afkhami**, H. Khoshshafar, “Simultaneous voltammetric determination of Hg (II) and Pb (II) based on carbon paste electrode modified with 3-(4-methoxybenzylideneamino)-2-thioxothiazolidin-4-one and multiwalled carbon nanotubes”, 18th Iranian Seminar of Analytical Chemistry, 18-20 May 2011, Sistan and Baluchestan University, Zahedan, Iran, Proceeding, p. 83.
 21. T. Madrakian, **A. Afkhami**, M. Rahimi, “Preconcentration of uranium(VI) from water samples by modified maghemite nanoparticles”, 18th Iranian Seminar of Analytical Chemistry, 18-20 May 2011, Sistan and Baluchestan University, Zahedan, Iran, Proceeding, p. 99.
 22. A. Afkhamia, T. Madrakiana, R. Ahmadi, H. Bagheri, “Determination of trace amounts of cadmium after its solid-phase extraction on alumina nanoparticles modified with a new Schiff base”, 18th Iranian Seminar of Analytical Chemistry, 18-20 May 2011, Sistan and Baluchestan University, Zahedan, Iran, Proceeding, p. 184.
 23. **A. Afkhami**, R. Norooz-Asl, “One step synthesis and functionalization of maghemite nanoparticles by precipitation technique and application for removal of methylene blue dye from aqueous solution, 17th Iranian Seminar of Analytical Chemistry, 12-14 September 2010, Kashan University, Kashan, Iran, Proceeding, p. 79.
 24. A. Yeganeh-faal, M. Amini, M. Bordbar, **A. Afkhami**, “Spectrophotometric and spectrofluorimetric determination of Fe (III) in aqueous solutions basis on effect of them on fluorescence and absorbance of triazine derivative dye in the

- presence of CTAB”, 17th Iranian Seminar of Analytical Chemistry, 12-14 September 2010, Kashan University, Kashan, Iran, Proceeding, p. 155.
25. A. Yeganeh-faal, M. Amini , M. Bordbar, **A. Afkhami**, “Determination of N-cethyl-N,N,N,trimethylammonium bromide (CTAB) with a dye intermediate in the presence of Triton X-100”, 17th Iranian Seminar of Analytical Chemistry, 12-14 September 2010, Kashan University, Kashan, Iran, Proceeding, p. 160.
 26. A. Afkhami, T. Madrakian, M. Abbasi-Tarighat, “Comparing the Applicability of Artificial Neural Networks for the Simultaneous Kinetic-Spectrophotometric Determination of Sn(II)and Sn(IV)”, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 37.
 27. **A. Afkhami**, H. Keypour, S. Soltanbeigy, F. Khajavi, M. Rezaei, “Spectrophotometric study of complex formation between a new Schiff base and some transition metal ions using rank annihilation factor analysis”, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 42.
 28. **A. Afkhami**, R. Norooz-Asl, M. Shariati-Rad, “Simultaneous spectrophotometric determination of orthophosphate and arsenate using partial least-squares (PLS) after micellmediated extraction,” 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 42.
 29. T. Madrakian, **A. Afkhami**, M. Mohammadnejad, “Spectrofluorimetric investigation of riboflavin/ β -cyclodextrin inclusion complex for determination of acidity and anionic formation constants using rank annihilation factor analysis”, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 46.
 30. **A. Afkhami** , H. Keypour, H. Khanmohammadi, K. Hejazi, F. Khajavi, “Spectrophotometric determination of acidity constants of three new Schiff bases using Rank Annihilation Factor Analysis, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 48.
 31. **A. Afkhami**, H. Keypour, M. Abbasi-Tarighat, F. Rahimi, “Spectrophotometric study of bis 2-(2-ethoxybenzylidene amino phenol) with some electron

- acceptor species in non-aqueous solvents”, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 74.
32. T. Madrakian, **A. Afkhami**, S. Maleki, “Sensitivity enhancement of the resazurin catalytic-spectrophotometric method of selenium (IV) determination by CTAB”, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 112.
33. **A. Afkhami**, R. Moosavi, “Application of superparamagnetic iron oxide nanoparticles (SPION) for enhanced adsorption and removal of acidic dyes”, 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 296.
34. T. Madrakian, **A. Afkhami**, R. Siri, “Sensitive spectrophotometric determination of trace amounts of vanadium(V) in foodstuff and water samples” 16th Iranian Seminar of Analytical Chemistry, 28-30 July 2009, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 325.
35. T. Madrakian, **A. Afkhami**, M. A. Zolfigol, F. Aboulghazi, " Preconcentration of Co, Ni, and Zn on naphthalene 2,4,6-trimorpholino-1,3,5-triazin adsorbent and flame atomic absorption determination", 6th Aegean Analytical Chemistry Days conference (AACD-2008), 9-12 October, 2008, Denizli, Turkey, Proceeding, p. 198.
36. **A. Afkhami**, T. Madrakian, M. Abbasi-Tarighat, M. Ataei, "Simultaneous spectrophotometric determination of Cu(II), Co(II) and Ni(II) using ratio spectra-continuous wavelet transformation", 6th Aegean Analytical Chemistry Days conference (AACD-2008), 9-12 October, 2008, Denizli, Turkey, Proceeding, p. 63.
37. A. Karimi, **A. Afkhami**, N. Alizadeh, “ Solid state captoprilate ion selective sensor based on electrochemically prepared polypyrrole for determination in Pharmaceutical preparations”, 7th Biennial Electrochemistry Seminar of Iran (7BESI), August 28-30, 2007, Urmia University, Urmia, Iran, Proceeding, p. 163.
38. **A. Afkhami**, “Some analytical applications of reaction rate methods”, 15th Iranian Seminar of Analytical Chemistry, February 27-March 1, 2007, Shiraz University, Shiraz, Iran, Proceeding, p. 688.

39. T. Madrakian, **A. Afkhami**, A. Mousavi, "Spectrophotometric determination of trace amounts of uranium after preconcentration on activated carbon", 15th Iranian Seminar of Analytical Chemistry, February 27-March 1, 2007, Shiraz University, Shiraz, Iran, Proceeding, p. 434.
40. N. Sarlak, **A. Afkhami**, "Design and characteristics of a sulfide and sulfite optode based on immobilization of methyl violet on a triacetylcellulose membrane", 15th Iranian Seminar of Analytical Chemistry, February 27-March 1, 2007, Shiraz University, Shiraz, Iran, Proceeding, p. 416.
41. A. Karimi, A. Mohammadi, **A. Afkhami**, N. Alizadeh, "Captopril determination in human serum and pharmaceutical preparations by solid-phase microextraction combined with ion mobility spectrometry", 15th Iranian Seminar of Analytical Chemistry, February 27-March 1, 2007, Shiraz University, Shiraz, Iran, Proceeding, p. 399.
42. T. Madrakian, **A. Afkhami**, M. Mohammadnejad, L. Khalafi, "Simultaneous spectrophotometric determination of levodopa and carbidopa in pharmaceutical formulations and water samples by using of mean centering of ratio spectra and H-point standard addition methods", 15th Iranian Seminar of Analytical Chemistry, February 27-March 1, 2007, Shiraz University, Shiraz, Iran, Proceeding, p. 326.
43. N. Sarlak, **A. Afkhami**, A. R. Zarei, "Simultaneous kinetic spectrophotometric determination of selenium and tellurium in micellar media using the partial least squares (PLS) regression", 15th Iranian Seminar of Analytical Chemistry, February 27-March 1, 2007, Shiraz University, Shiraz, Iran, Proceeding, p. 324.
44. D. Nematollahi, **A. Afkhami**, T. Shariatmanesh, E. Tammari, M. Rafiee, "Electrochemical study of catechol in the presence of sodium azide. Application to the electro-organic synthesis of a new diaminoquinone derivative", 6th Biennial Electrochemistry Seminar of Iran (6BESI), 7-9 September 2005, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 222.
45. D. Nematollahi, **A. Afkhami**, T. Shariatmanesh, E. Tammari, M. Hesari, "Determination of azide ion based on its electrochemical catalytic reaction with 4-cyanocatechol", 6th Biennial Electrochemistry Seminar of Iran (6BESI), 7-9 September 2005, Bu-Ali Sina University, Hamadan, Iran, Proceeding, p. 221.

46. T. Madrakian, **A. Afkhami**, R. Moein, M. Bahram, “Simultaneous spectrophotometric determination of Zn(II) and Ni(II) in water samples by mean centering of ratio kinetic profiles method”, 1st Iranian Seminar of Chemometrics, 5,6 September 2006, Arak University, Arak, Arak, Iran, p. 58.
47. T. Madrakian, **A. Afkhami**, R. Moein, M. Bahram, “Simultaneous spectrophotometric determination of Sn(II) and Sn(IV) in water samples by mean centering of ratio kinetic profiles and partial least squares methods”, 1st Iranian Seminar of Chemometrics, 5,6 September 2006, Arak University, Arak, Arak, Iran, p. 56.
48. M. Bahram, **A. Afkhami**, R. Bro, C. Stedmon, “ Handling of Rayleigh and Raman scatter for PARAFAC modeling of fluorescence data using interpolation”, 1st Iranian Seminar of Chemometrics, 5,6 September 2006, Arak University, Arak, Arak, Iran, p. 24.
49. T. Madrakian, **A. Afkhami**, M. A. Zolfigol, M. Solgi, “ Determination of silver ion by atomic absorption spectrometry after separation and preconcentration on silica gel modified with 2,4,6-trimorpholino-1,3,5-triazine”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 428.
50. **A. Afkhami**, N. Sarlak, A. R. Zarei, T. Madrakian, “ Simultaneous kinetic spectrophotometric determination of sulfite and sulfide using partial least squares (PLS) method”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 299.
51. E. Karkhaneei, **A. Afkhami**, H. Keypour, R. Ziaei, “Conductometric determination of stability constants of Co, Ni, Cu and Zn with two recently synthesized O₂N₄ macrocyclic ligands”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 270.
52. **A. Afkhami**, T. Madrakian, H. Siampour, “ Cloud point extraction spectrophotometric determination of trace quantities of bismuth in water and urine samples”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 154.
53. **A. Afkhami**, N. Sarlak, “Spectrophotometric determination of salicylamide and paracetamol in biological samples and pharmaceutical formulations by a

- differential kinetic method”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 143.
54. **A. Afkhami**, T. Madrakian, A. Maleki, M. Bahram, “Cloud point extraction for the sequential spectrophotometric determination of hydroxylamine and nitrite”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 93.
55. **A. Afkhami**, T. Madrakian, A. Maleki, “ Kinetic-spectrophotometric determination of hydroxylamine bases on its reaction with iodate”, 14th Iran’s Seminar of Analytical Chemistry, 29-31 August 2005, University of Birjand, Birjand, Iran, proceeding, p. 92.
56. **A. Afkhami** and N. Sarlak, “Simultaneous determination of salicylamide and paracetamol by spectrophotometric H-point standard addition method and partial least squares regression”, 13th Iran’s Seminar of Analytical Chemistry, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 142.
57. T. Madrakian, **A. Afkhami**, M. Torab Beigi, “Spectroscopic study of charge transfer complex of tetraethylene glycol-bis-8-quinolyl-ether with ICl₃ in various solvents, 13th Iran’s Seminar of Analytical Chemistry”, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 173.
58. **A. Afkhami**, Sh. Masahi and M. Bahram, “Spectrophotometric Determination of Nitrite Based on Its Reaction with *p*-Nitroaniline in the Presence of Diphenylamine in Micellar Media”, 13th Iran’s Seminar of Analytical Chemistry”, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 256.
59. T. Madrakian, **A. Afkhami**, M. Borazjani and M. Bahram, “Simultaneous determination of levodopa and carbidopa in pharmaceutical formulations using derivative spectrophotometry”, 13th Iran’s Seminar of Analytical Chemistry”, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 436.
60. **A. Afkhami** and N. Sarlak, “Optical sensors for determination of low pH values and high acid concentrations”, 13th Iran’s Seminar of Analytical Chemistry”, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 440.

61. **A. Afkhami**, L. Khalafi, "Spectrophotometric determination of some catecholamines by electrolytically generation of their colored derivatives", 13th Iran's Seminar of Analytical Chemistry", 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 441.
62. **A. Afkhami** and M. Bahram, "Mean centering of ratio spectra as a new spectrophotometric method for the analysis of binary and ternary mixtures", 13th Iran's Seminar of Analytical Chemistry", 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p.477.
63. **A. Afkhami**, and A. R. Zarei, "Simultaneous kinetic-spectrophotometric determination of beryllium and aluminium by Spectrophotometric H-point standard addition method", 13th Iran's Seminar of Analytical Chemistry", 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 49.
64. **A. Afkhami**, L. Khalafi, "Investigation of the electrochemical behavior of some catecholamines in the presence of 4-aminobenzoic acid", 13th Iran's Seminar of Analytical Chemistry, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 13.
65. **A. Afkhami**, T. Madrakian, H. Tahmasebi, H. Keypour, H. Khan Mohammadi, "Interaction of a polyamine ligand containing salicylaldehyde groups with iodine in dichloromethane", 13th Iran's Seminar of Analytical Chemistry, 18-20 May 2004, Ferdowsi University of Mashhad, Mashhad, Iran, proceeding, p. 66.
66. **A. Afkhami** and M. Bahram, "Successive derivative- ratio spectra, as a new spectrophotometric method for the analysis of ternary mixtures", 14th Iranian Chemistry & Chemical Engineering Congress, 17-19 February 2004, Teacher Training University, Tehran, Iran, proceeding, p. 21.
67. T. Madrakian, **A. Afkhami**, M. Borazjani and M. Bahram, "The simultaneous spectrophotometric determination of aluminium and beryllium in alloys using xylenol orange and partial least squares regression", 14th Iranian Chemistry & Chemical Engineering Congress, 17-19 February 2004, Teacher Training University, Tehran, Iran, proceeding, p. 25.
68. **A. Afkhami**, D. Nematollahi, F. Mosaed, M. Rafiee, "Investigation of the electrooxidation and oxidation of catechol in the presence of sulfanilic acid",

- 5th Biennial Seminar of Electrochemistry of Iran, 10-11 September 2003, Shahid Bahonar University, Kerman, Iran, proceeding, p. 13.
69. D. Nematollahi, **A. Afkhami**, L. Khalafi, M. Rafiee, "Kinetic study of the oxidation of some catecholamines by digital simulation of cyclic voltammograms", 5th Biennial Seminar of Electrochemistry of Iran, 10-11 September 2003, Shahid Bahonar University, Kerman, Iran, proceeding, p. 50.
70. **A. Afkhami**, T. Madrakian, A. Abdolmaleki, "Kinetic-spectrophotometric determination of traces of Sb(III) based on its inhibitory effect on the bleaching reaction of methyl orange", 12th Iranian Seminar of Analytical Chemistry, 28-30 January 2003, Mazandaran University, Babolsar, Iran, Proceeding, p. 76.
71. **A. Afkhami**, M. Bahram, H-point standard addition method for simultaneous determination of Co(II) and Ni(II) by 1-(2-pyridylazo)2-naphthol in micellar media", 12th Iranian Seminar of Analytical Chemistry, 28-30 January 2003, Mazandaran University, Babolsar, Iran, Proceeding, p. 278.
72. **A. Afkhami**, A. R. Zarei, " Simultaneous spectrophotometric determination of Bi(III) and Sb(III) based on their complexes with iodide in acidic media using H-point standard addition method and first derivative spectrophotometry", 12th Iranian Seminar of Analytical Chemistry, 28-30 January 2003, Mazandaran University, Babolsar, Iran, Proceeding, p. 302.
73. **A. Afkhami**, "Removing of Nitrate and Nitrite from water by High Area Carbon Cloth". 1st Iranian seminar of Chemistry and Environment, 21-22 October 2002, Yasouj University, Yasouj, Iran, Proceeding, p. 23.
74. M. A. Zolfigol, T. Madrakian, E. Ghaemi, **A. Afkhami**, S. Azizian, Sh. Afshar, Synthesis of Morpholinated and 8-Hydroxyquinolinated Silica Gel and Their Application to Water Softening" 1st Iranian seminar of Chemistry and Environment, 21-22 October 2002, Yasouj University, Yasouj, Iran, Proceeding, p. 34.
75. **A. Afkhami**, A. Abdolmaleki, A. Esmaeili, "Determination of thiocyanate by kinetic method based on the bromate-hydrochloric acid reaction", 11th Iranian Seminar of Analytical Chemistry, 29-31 January 2002, Yazd University, Yazd, Iran, Proceeding, p. 114.
76. **A. Afkhami**, A. R. Zarei, "Kinetic-Spectrophotometric Determination of Rhodium(III) Based on Its Catalytic Effect on the Oxidation of Malachite

Green with Periodate”, 11th Iranian Seminar of Analytical Chemistry, 29-31
January 2002, Yazd University, Yazd, Iran, Proceeding, p. 250.