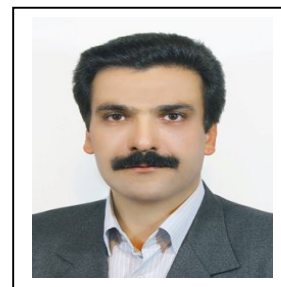


Curriculum Vitae

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Educational Record:

Name of institution	Year	Degree	Major
1- Otago (New Zealand)	1997	Ph.D.	Electroanalytical Chemistry
2- Mazandaran (Iran)	1991	M.Sc.	Analytical Chemistry
3- Beheshti (Iran)	1989	B.Sc.	Pure Chemistry

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Teaching Specialization:

- Electroanalytical Chemistry
- Analytical Chemistry
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Area of Research Interest:

- 1- Nano-electrochemical investigations.
- 2 – Fabrication and application of electrochemical nano-sensors and biosensors in determination of organic and biological important compounds.
- 3- Determination of trace ions in water and industrial waste water by adsorptive stripping voltammetry method.
- 4 - Application of modified electrodes in trace determination of ions and compounds in water using stripping voltammetry methods.
- 5– Industrial electrochemistry investigations.
- 6 - Electrochemical and spectroelectrochemical studies of quinones and some related compounds in non-aqueous solutions.

Published papers in Journals:

- 1) **A. Babaei**, A.J. McQuillan, " In situ spectroelectrochemical studies of the decomposition of hydroquinones on platinum electrodes in dichloromethane solutions", *Journal of Physical Chemistry B*, **101** (1997) 7443.
- 2) **A. Babaei**, P.A. Connor, A.J. McQuillan , "UV-Visible spectroelectrochemistry of reduction products of anthraquinone in dimethyl formamide solutions", *Journal of Chemical Education*, **74** (1997) 1200.
- 3) G-Balakrishnan, **A. Babaei**, A.J. McQuillan, S. Umapathy, " Resonance Raman and infrared spectral studies on radical anions of model photosynthetic reaction center quinones (naphthoquinone derivatives)", *Journal of Biomolecular Structure and Dynamics* ,**16** (1998) 123.
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- 11) M. Zendehtdel, **A. Babaei**, Sh. Alami, " Intercalation of xylenol orange, morin and calmagite into NaY zeolite and their application in dye/zeolite modified electrode", *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, (2007) **59** (2007) 345.
- 12) A. Salimi, B. Kavooosi, **A. Babaei**, R. Hallalji, "Electrosorption of Os(III)-complex at single-wall carbon nanotube immobilized on glassy carbon electrode : Application to nanomolar detection of bromate, periodate and iodate", *Analytica Chimica Acta*, **618** (2008) 43.
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- 19) **A. Babaei**, B. Khalilzadeh, M. Afrasiabi, " A new sensor for the simultaneous determination of paracetamol and mefenamic acid in pharmaceutical preparation and biological samples using copper(II) doped zeolite modified carbon paste electrode" *Journal of applied electrochemistry* **40** (2010) 1537-1543.
- 20) **A. Babaei**, M. Afrasiabi, M. Babazadeh, " A glassy carbon electrode modified with multiwalled carbon nanotube/chitosan composite as a new sensor for simultaneous determination of acetaminophen and mefenamic acid in pharmaceutical preparations and biological samples" *Electroanalysis* **22** (2010) 1743-1749.
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- 42) **A. Babaei**, M. Farshbaf, M. Afrasiabi F. Bamdad , A. Dehdashti, "Development of a method for a sensitive simultaneous determination of acetaminophen and tryptophan in biological samples" *Analytical & Bioanalytical Electrochemistry*, **5** (2013) 381-394.
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- 54) **A. Babaei**, M. Sohrabi, "An electrospun alumina-borateoxidenanofiberand reduced graphene oxide composite modifiedcarbon pasteelectrodeasthe electrochemical sensor forsimultaneous determination ofdopamineandnoscapine" *Analytical Methods*, **8** (2016) 6949-6958.

Presented Papers in Conferences:

- 1) **A. Babaei**, A. James McQuillan, "In-Situ UV-visible and FTIR Spectroelectrochemical studies of the decomposition of hydroquinone on platinum electrode in dichloromethane solution", 13th Iranian Chemistry and Chemical Engineering Congress, February 16-18 (1999), Modarres University, Tehran, Iran.
- 2) **A. Babaei**, A. James McQuillan, " Spectroelectrochemical study of the deposition of hydroquinone anion salt on platinum electrodes from dichloromethane solution" 3rd Bienial Sminar of Electrochemistry of Iran, May 19-20 (1999), Mazandaran University, Babolsar, Iran.
- 3) **A. Babaei**, M. Mazdaei, "The electrochemical and UV-Visible Spectroelectrochemical study on effects of proton on reduction products of anthraquinone 2-sulfonate in dimethyl formide solutions", 4th Bienial Sminar of Electrochemistry of Iran, June 13-14 (2001), Tehran University, Tehran, Iran.
- 4) **A. Babaei**, J. Thimm, A. J. McQuillan, " Application of AFM technique for determination structure of electrochemically reconstructed gold electrode and effects of surface reconstruction on electrochemical behaviour of hydroquinone" 11th Iranian Seminar of Analytical Chemistry, January 29-31 (2002), Yazd Universty, Yazd, Iran.
- 5) **A. Babaei** L. Faraj Sharabiani, " In-Situ UV-visible spectroelectrochemical and electrochemical studies on effects of proton on reduction products of 1-amino anthraquinone in dimethyl formamide folution" 11th Iranian Seminar of Analytical Chemistry, January 29-31 (2002), Yazd Universty, Yazd, Iran.

- 6) **A. Babaei**, G. Moshirizadeh, "UV-visible spectroelectrochemical studies on effect of proton on electrochemical behaviour of anthraquinone derivatives in nonaqueous media" 12th Iranian Seminar of Analytical Chemistry, January 28-30 (2003), Mazandaran University, Babolsar, Iran.
- 7) **A. Babaei**, E. Shams, M. Soltaninezhad, " Simultaneous determination of copper, zinc and lead by adsorptive stripping voltammetry in the presence of morin", 5th Biennial Seminar of Electrochemistry of Iran, September 10-11 (2003), Kerman University, Kerman, Iran.
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- 11) **A. Babaei**, Mohsen Shenaie, " Application of adsorptive stripping voltammetry in determination of copper and vanadium in the presence of pyrocatechol violet (PV)", 4th Aegean Analytical Chemistry Days, September 29 to October 3 (2004), Adnan Mendres University, Aydin, Turkey.
- 12) **A. Babaei**, A. Samadzadeh, " Ultra trace determination of cobalt using catalytic adsorptive stripping voltammetry technique" 4th Aegean Analytical Chemistry Days, September 29 to October 3 (2004), Adnan Mendres University, Aydin, Turkey.
- 13) **A. Babaei**, A. Samadzadeh, " Application of adsorptive stripping voltammetry for simultaneous determination of copper(II), bismuth(II) and lead (II)" 6th Biennial Seminar of Electrochemistry of Iran, September 7-9 (2005), BouAli Sina University, Hamadan, Iran.
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- 17) **A. Babaei**, E. Shams, A. Taheri, "A highly sensitive and selective determination of dopamine in the presence of ascorbic acid and uric acid using carbon paste modified by silicagel zirconium phosphate", 11th international symposium on electroanalytical chemistry, August 16-19 (2007), Changchun, China.
- 18) **A. Babaei**, M. Zendehtdel, B. Khalizadeh, A. Taheri, "Simultaneous determination of tryptophan, uric acid and ascorbic acid at iron(III) doped zeolite modified carbon paste electrode", 7th Biennial Electrochemistry Seminar of Iran, August 28-30 (2007), Urmia University, Urmia, Iran.
- 19) **A. Babaei**, T. Toosi, "Application of catalytic adsorptive stripping voltammetry method in trace determination of iron ion in the presence of thymolphthalein" 7th Biennial Electrochemistry Seminar of Iran, August 28-30 (2007), Urmia University, Urmia, Iran.
- 20) M. Babazadeh, **A. Babaei**, "Application of cathodic adsorptive stripping voltammetry in simultaneous determination of cadmium and copper in the presence of thymolphthalein", 7th Biennial Electrochemistry Seminar of Iran, August 28-30 (2007), Urmia University, Urmia, Iran.
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- 23) **A. Babaei**, B. Khalizadeh, "A sensitive simultaneous determination of paracetamol and mefenamic acid using copper (II) doped zeolite modified carbon paste electrode", The First Regional Symposium on Bioelectrochemistry, October 13-15, (2008), University of Tehran, Institute of Biochemistry and Biophysics, Tehran, Iran.
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- 32) **A. Babaei**, D.Garette, A.J. Downard, "Electrochemical investigations on chemically attached vertically aligned carbon nanotube forests using a diazonium salt method: Towards direct electrochemistry of myoglobin on the electrode surface" 9th Biennial Electrochemistry Seminar of Iran, January 21-23 (2011), Yazd University, Yazd, Iran
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