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	<b>Address</b>	Department of Chemistry, Faculty of Science, Arak University, Arak 38156-8-8349, Iran
<b>Areas of Expertise</b>		
Coordination Chemistry Azo-Azomethine Ligands and Their Optical Properties Molecular Sensors Molecular Logic Gates		
<b>Research Interests</b>		
Design and synthesis of polyaza macrocyclic and macroacyclic Schiff base ligands Design and synthesis of azo-azomethine sensors for recognition and sensing of physiologically important molecules, anions and cations Nanomaterials		
<b>Education</b>		
B.Sc., <b>University of Bu-Ali Sina</b> , Hamedan, IRAN (1994) M.Sc. <b>University of Teacher Training Tehran</b> , Tehran, IRAN, Inorganic Chemistry (1997) <b>Thesis:</b> Synthesis and characterization of mono- and di- substituted phosphite derivates of $\text{Fe}(\text{CO})_5$ , <b>Advisor:</b> Prof. Akbar Shabari. Ph.D., <b>University of Bu-Ali Sina</b> , Hamedan, IRAN, Inorganic Chemistry (2003) <b>Thesis:</b> Synthesis and Characterization of macrocyclic Schiff base Complexes containing pendant arms with some metal ions, <b>Advisor:</b> Prof. Hassan Keypour.		
<b>Biography</b>		
Hamid Khanmohammadi was born in Hamedan in 1972, he finished his high school in Hamedan and then entered Bu-Ali Sina University (I.R. IRAN) for bachelor of Pure Chemistry. He received his Ph.D. in inorganic chemistry in 2003 from the Bu-Ali Sina University. After that, he		

was a research director of the inorganic chemistry research unit of Arak University. He is currently an associated professor of inorganic chemistry at Arak University.

Hamid Khanmohammadi is the author of over 45 refereed articles in chemistry and related areas. His specific area of interest is in design and synthesis of polyaza, macrocyclic and macroacyclic Schiff base ligands, and applications of them in science. He also works to design and synthesis of new azo-azomethine sensors for recognition and sensing of physiologically important anions and cations.

### Awards

Member of Iranian Chemical Society (<http://ics.ir/>)

### Affiliations

### Grants and Contracts Awarded

### Publications & Presentations

#### *Selected Publications:*

1. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor. '*Synthesis and crystal structure determination of some novel Zinc(II) macrocyclic heptaaza Schiff-base complexes with two 2-aminoethyl pendant arms*', Inorg. Chim. Acta., 355c (**2003**) 286.
2. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor. '*Synthesis, crystal structure, NMR and ab initio molecular-orbital studies of some magnesium(II) macrocyclic Schiff-base complexes, with two 2-aminoethyl pendant arms*', Inorg. Chim. Acta. 357 (**2004**) 1283-1291.
3. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor. '*Synthesis, X-ray Characterization, NMR and ab initio Molecular-Orbital Studies of Some Cadmium(II) Macrocyclic Schiff-Base Complexes with Two 2-aminoethyl Pendant Arms*', Journal of The Iranian Chemical Society, 1 (**2004**) 53.
4. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor. '*Synthesis, crystal structures and ab initio studies of some heptaaza manganese(II) macrocyclic Schiff-base complexes with two 2-aminoethyl pendant arms*', Inorg. Chim. Acta. 358 (**2005**) 247-256.
5. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Saeed Jameh-bozorgi. '*Synthesis, Characterization, and ab initio Study of Manganese(II) Macrocyclic Schiff Base Complex with two 2-aminoethyl Pendant Arms*', Transition Metal Chemistry, 29 (**2004**) 523.

6. **Hamid Khanmohammadi**; Razyeh Arabahmadi; Mohammad H. Abnosi and Hamid R. Khavasi, *Synthesis, crystal structure, spectral and biological studies of CuII–MII(M = Zn and Pb) heterodinuclear complexes of new phenol-based macrocyclic ligands*, Polyhedron 26 (2007) 4963–4970.
7. **Hamid Khanmohammadi**, Saeid Amani, Heinrich Lang and Tobias Rüeffler. *Synthesis and characterization of Mg(II), Mn(II), Zn(II) and Cd(II) complexes with a new pendant-armed heptaaza Schiff base macrocycle: X-ray crystal structure, NMR and computational study*, Inorg. Chim. Acta, 360 (2007) 579–587.
8. Abbas Afkhami, Tayebah Madrakian, H. Tahmasebi, Hassan Keypour, **Hamid Khanmohammadi**, *Interaction of new polyamine ligand with iodine in chloroform and dichloromethane solutions*, Physics and Chemistry of Liquids, 46 (2008) 372-378.
9. Hassan Keypour, Reza Azadbakht, Sadegh Salehzadeh, **Hamid Khanmohammadi**, Hamid R. Khavasi, Harry Adams, *Synthesis of two new tripodal ligands and their cyclocondensation with 2-[2-(2-formylphenoxy)ethoxy]benzaldehyde in the presence of manganese(II) and cadmium(II) metal ions*, Polyhedron, 27 (2008) 1631-38.
10. Hassan Keypour, Reza Azadbakht, Sadegh Salehzadeh, **Hamid Khanmohammadi**, Hamid R. Khavasi, Harry Adams, *Synthesis, crystal structure and spectroscopic properties of some cadmium (II) complexes with three polyamine and corresponding macrocyclic Schiff base ligands*, Journal of Organometallic Chemistry, 693 (2008) 2237-43.
11. **Hamid Khanmohammadi**, Mohammad H. Abnosi, Ali Hosseinzadeh, Mealihe Erfantalab, *Synthesis, biological and computational study of new Schiff base hydrazones bearing 3-(4-pyridine)-5-mercapto-1,2,4-triazole moiety*, Spectrochim. Acta, Part A, 71 (2008) 1474-1480.
12. **Hamid Khanmohammadi**, Mehdi Salehifard, Mohammad H. Abnosi, *Synthesis, characterization, biological and thermal studies of Cu(II) complexes of salen and tetrahdrosalen ligands*, Journal of the Iranian Chemical Society, 6 (2009) 300-309.
13. **Hamid Khanmohammadi**, Hassan Keypour, Mehdi Salehifard, Mohammad H. Abnosi, *Synthesis and biological activity of Magnesium(II) complexes of heptaaza Schiff-base macrocyclic ligands; <sup>1</sup>H and <sup>13</sup>C chemical shifts computed by the GIAO-DFT and CSGT-DFT methodologies*, J. Incl. Phenom. Macrocycl. Chem., 63 (2009) 97-108.
14. Abbas Afkhami, Maryam Abassi-Trighat, **Hamid Khanmohammadi**, *Simultaneous determination of Co<sup>2+</sup>, Ni<sup>2+</sup>, Cu<sup>2+</sup> and Zn<sup>2+</sup> ions in foodstuffs and vegetables with a new Schiff base using artificial neural networks*, Talanta, 77 (2009) 995-1001.
15. Abbas Afkhami, Farzad Khagavi, **Hamid Khanmohammadi**, *Spectrophotometric Determination of Complex Formation Constants Between a New Schiff Base and Some Transition Metals by Rank Annihilation Factor Analysis*, Journal of Engineering Data, 54 (2009) 866-870.
16. Abbas Afkhami, Farzad Khagavi, **Hamid 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.

17. Abbas Afkhami, Farzad Khagavi, **Hamid 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.
18. **Hamid Khanmohammadi** and Maryam Darvishpour, New azo ligands containing azomethine groups in the pyridazine-based chain; synthesis and characterization, Dyes and Pigments, 81 (2009) 167-173.
19. **Hamid Khanmohammadi** and Maliheh Erfantalab, Pyridazine-based Schiff base ligands with  $N_4O_xS_2$  ( $x=2, 4$ ) donor set atoms: Synthesis, characterization, spectral studies and  $^{13}C$  chemical shifts computed by the GIAO-DFT and CSGT-DFT methodologies, Spectrochim. Acta Part A, 75 (2010) 127-133.
20. **Hamid Khanmohammadi** and Maliheh Erfantalab, New asymmetric heptaaza Schiff base macrocyclic complex of Mn(II); crystal structure, biological and DFT studies, Spectrochim. Acta Part A, 77 (2010) 342-347.
21. M. Zendejdel, **Hamid Khanmohammadi** and M. Mokhtari, Host (nano cage NaY) /guest Mn (II), Co(II), Ni(II) and Cu(II) complexes of N,N-bis(3,5-di-tert-butylsalicyden)2,2-diaminopropan: Synthesis and catalyst activity, J. Chinese Chem. Soc., 57 (2010) 502-512.
22. **Hamid Khanmohammadi** and Maryam Darvishpour, Copper(II) complexes of pyridazine-based azo-azomethine ligands: Synthesis, characterization and absorption properties, J. Inorg. Organomet. Poly. 21(2011) 541-546.
23. Mohammad hossein Fekri, **Hamid Khanmohammadi** and Maryam Darvishpour An electrochemical Cr(III)-Selective Sensor-Based on a Newly Synthesized Ligand and Optimization of Electrode With a Nano Particle, Int. J. Electrochem. Sci., 6 (2011) 1679 – 1685.
24. **Hamid Khanmohammadi** and Maliheh Erfantalab, New 1,2,4-triazole-based azo-azomethine dyes. Part I: Synthesis, characterization and spectroscopic studies, Spectrochimica Acta Part A 86 (2012) 39– 43.
25. **Hamid Khanmohammadi**, Maliheh Erfantalab,..., New 1,2,4-triazole-based azo–azomethine dyes. Part II: Synthesis, characterization, electrochemical properties and computational studies, Spectrochimica Acta Part A 86 (2012) 39– 43.
26. **Hamid Khanmohammadi** and Khtereh Rezaeian, Thermally stable water insoluble azo-azomethine dyes: Synthesis, characterization and solvatochromic properties, Spectrochimica Acta Part A 97 (2012) 652- 658.
27. Abbas Afkhamia, Tayyeb Madrakiana, Hamed Ghaedia, **Hamid Khanmohammadi**, Construction of a chemically modified electrode for the

selective determination of nitrite and nitrate ions based on a new nanocomposite, *Electrochimica Acta* 66 (2012) 255– 264.

28. **Hamid Khanmohammadi** and Alyeh Abdollahi, New diaminomaleonitrile-based azo-azomethine dyes; synthesis, characterization and spectral properties, *Dyes and Pigments* 94 (2012) 163-168.
29. **Hamid Khanmohammadi** and Fatemeh Khodam, Solvatochromic and lectrochemical properties of new thermally stable azo–azomethine dyes with N<sub>2</sub>S<sub>2</sub>O<sub>2</sub> donor set of atoms, *J. Mol. Liq.* 177 (2013) 198-203.
30. **Hamid Khanmohammadi**, Malihe Erfantalab, Golamhassan Azimi, New acyclic 1,2,4-triazole-based Schiff base hydrazone: Synthesis, characterization, spectrophotometric and computational studies, *Spectrochimica Acta Part A* 105(2013) 338-343.
31. **Hamid Khanmohammadi** Khatereh Rezaeian, Mostafa M. Amini, Seik Weng Ng, New azo-azomethine dyes and their Ni(II) complexes: Synthesis, characterization, thermal and spectral properties, *Dyes and Pigments* 98 (2013) 557-564.
32. **Hamid Khanmohammadi** and Maliheh Erfantalab, Mononuclear copper(II) complexes of bis-triazole-based macrocyclic Schiff base hydrazones; direct synthesis, EPR studies, magnetic and thermal properties, *J.I. Chem. Soc.* 11 (2014) 323– 333.
34. **Hamid Khanmohammadi** and Khatereh Rezaeian, Naked-eye detection of inorganic fluoride in aqueous media using a new azo-azomethine colorimetric receptor enhanced by electron withdrawing groups' *RSC Adv.* 4 (2014) 1032-38.
35. Malihe Erfantalab and **Hamid Khanmohammadi**, , New 1,2,4-triazole-based azo–azomethine dye. Part III: Synthesis, characterization, thermal property, spectrophotometric and computational studies, *Spectrochimica Acta Part A* 125(2014) 345-352.
36. Khatereh Rezaeian and **Hamid Khanmohammadi**, Naked-eye detection of biologically important anions by a new chromogenic azo-azomethine sensor, *Spectrochimica Acta Part A* 133(2014) 31-37.
37. **Hamid Khanmohammadi**, Maryam Pass and Golamreza Talei, Solvatochromism, spectral properties and antimicrobial activities of new azo-azomethine dyes with N<sub>2</sub>S<sub>2</sub>O<sub>2</sub> donor set of atoms' *J. Mol. Stru.*, 1072 (2014) 232-237.
38. **Hamid Khanmohammadi** and Khatereh Rezaeian, Catalyst-free approach to a novel imidazo [4,5-f][1,10] phenanthroline ligand and its corresponding ruthenium(II) complex: insights into their applications in colorimetric anion sensing, *New journal of chemistry*, 38 (2014) 5538-5543
39. **Hamid Khanmohammadi**, Khatereh Rezaeian and Alieh Abdollahi, Colorimetric detection of anions in aqueous media using N-monosubstituted diaminomaleonitrile-based azo-azomethine receptors: Real-life applications, *Spectrochimica Acta Part A* 139(2015) 405-412.

40. **Hamid Khanmohammadi** and Khatareh Rezaeian, Solar-light induced photodecolorization of water soluble azo-azomethine dye: influence of operational parameters and nanophotocatalysts' *Desalination and Water Treatment*, 55 (2015) 655-663.
41. Khatareh Rezaeian **Hamid Khanmohammadi**, 'Two and three input molecular logic operations mediated by a novel azo-azomethine based chromogenic probe through intramolecular charge transfer processes' *New J. Chem.*, 39 (2015) 2081-2089.
42. Khatareh Rezaeian, **Hamid Khanmohammadi**, Vajihe Arab, 'Rational design of a novel azoimine appended maleonitrile-based Salen chemosensor for rapid naked-eye detection of copper(II) ion in aqueous media' *Spectrochimica Acta Part A* 151(2015) 848-853.
43. Khatareh Rezaeian, **Hamid Khanmohammadi**, 'Molecular logic circuits and a security keypad lock based on a novel colorimetric azo receptor with dual detection ability for copper(II) and fluoride ions' *Supramol. Chem.*, 28 (2016) 256-2666.
44. Samira Gholizadeh Dogah, Maria Jose Heras Ojea, Lidia Rosado Piquer, Lluís Artús Suárez, **Hamid Khanmohammadi**, Guillem Aromí, and E. Carolina Sanudo, 'Co(II) and Cu(II) Fluorescent Complexes with Acridine-Based Ligands' *Eur. J. Inorg. Chem.* 20 (2016), 3314-3321.
45. Mojgan Zendehejdel, Fahimeh Zamani, **Hamid Khanmohammadi**, 'Immobilized 4-Methyl-2,6-diformyl Phenol Complexes on a Zeolite: Characterization and Catalytic Applications in Esterification, Diels-Alder and Aldol condensation, Microporous and Mesoporous Materials, 225 (2016) 552-563.

### ***Selected Presentations:***

1. Hassan Keypour and **Hamid Khanmohammad**. *Synthesis and Characterization of Cadmium(II) Schiff-Base Macrocyclic Complex with two 2-aminoethyl Pendant Arms*. 6<sup>th</sup> Iranian inorganic Chemistry Seminar (2001).
2. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor. *Ab initio Molecular-Orbital Studies of The Manganese(II) Schiff-Base Macrocyclic Complexes*. The Second Seminar of Macrocyclic Chemistry (2003).
3. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor. *Synthesis of New Complexes of [1+1] Heptaaza Schiff-*

*Base Macrocyclic Ligand with two 2-aminoethyl Pendant Arms. The Second Seminar of Macrocyclic Chemistry (2003).*

4. Hassan Keypour, **Hamid Khanmohammadi**, Kevin P. Wainwright, and Max R. Taylor, Saeed, Jameh-Bozorgi. *Ab initio Molecular-Orbital Studies of The Magnesium(II) Schiff-Base Macrocyclic Complexes. The Second Seminar of Macrocycli Chemistry (2003).*

5. Hassan Keypour, Leila Klantari bengar, **Hamid Khanmohammadi**. *Synthesis and Characterization of the Potentially Heptadentate (N4O3) Schiff-Base Ligand and Fe(III) Complex of its Amine Phenol Ligand. 7<sup>th</sup> Iranian Seminar of Inorganic Chemistry (2003).*

6. Hassan Keypour, Leila Klantari bengar, Sadegh Salehzadeh, **Hamid Khanmohammadi**. *Mn(II) and Fe(III) Complexes of Two Potentially Heptadentate (N4O3) Tripodal Ligands. 7<sup>th</sup> Iranian Seminar of Inorganic Chemistry (2003).*

7. Hassan Keypour, Leila Klantari bengar, **Hamid Khanmohammadi**. *Synthesis and Characterization of Amino Phenol (tris(((2-hydroxybenzyl)-amine)propyl)amine (H<sub>3</sub>L) and Lantanide Complex. 7<sup>th</sup> Iranian Seminar of Inorganic Chemistry (2003).*

8. Hassan Keypour and **Hamid Khanmohammad**. *Synthesis of new Members of Potentially Binuclear Schiff-Base Ligands and related Iron(III) Complexes. 14<sup>th</sup> Iranian Chemistry & Chemical Engineering Congress.*

9. Hassan Keypour, **Hamid Khanmohammad** and Kevin P. Wainwright. *Synthesis, Characterization and ab initio Study of a Novel Magnesium(II) Marocyclic Schiff Base Complex. 14<sup>th</sup> Iranian Chemistry & Chemical Engineering Congress.*

10. Hassan Keypour , F. Azizzadeh and **Hamid Khanmohammad**. *Synthesis and Characterization Zn(II) complexes of both marocyclic Schiff Base ligand, with a side chain containing antheracene fragment and it's reduced form. 8<sup>th</sup> Iranian Inorganic Chemistry Conference (2004).*

11. Hassan Keypour , F. Azizzadeh and **Hamid Khanmohammad**. *Synthesis and Characterization Zn(II) complexes of both pendant armed marocyclic Schiff Base ligand and it's reduced form. 8<sup>th</sup> Iranian Inorganic Chemistry Conference (2004).*

12. Hassan Keypour , F. Azizzadeh and **Hamid Khanmohammad**. *Synthesis and Characterization Mn(II) complexes of both pendant armed marocyclic Schiff Base ligand and it's reduced form. 8<sup>th</sup> Iranian Inorganic Chemistry Conference (2004).*

13. Hassan Keypour , F. Azizzadeh and **Hamid Khanmohammad**. *Synthesis and Characterization of a new pendant armed marocyclic Schiff Base ligand,*

*it's reduced form and their related Cd(II) complexes.* **8<sup>th</sup>** Iranian Inorganic Chemistry Conference (2004).

14. A.Afkhami, ..., **Hamid Khanmohammad**. I ntraction of a polyamine ligand containing salicylaldehyde groups with iodone in dichloromethane. **13<sup>th</sup>** *Iranian Analitical Chemistry Conference (2004).*

15. **Hamid Khanmohammadi**, Salame Asadi, Synthesis and characterization of dinuclear macrocyclic M(II) complexes (M= Ni and Cu) of trinucleating hexaaza triphenolic Schiff base macrocycles. **9<sup>th</sup>** *Iranian Inorganic Chemistry conference, 7-8 March 2007.*

16. **Hamid Khanmohammadi**, Mehdi Salehi Fard and Malihe Erfantalab, Synthesis and characterization of new chiral Mg(II) Schiff base macrocyclic complex and computational study of the <sup>1</sup>H NMR isotropic chemical shifts using DFT optimized geometry. **9<sup>th</sup>** *Iranian Inorganic Chemistry conference, 7-8 March 2007.*

17. **Hamid Khanmohammadi**, Javad Zolgharnein and Saeedeh Yossefi, Javad Zolgharnein and Saeedeh Yossefi. **9<sup>th</sup>** *Iranian Inorganic Chemistry conference, 7-8 March 2007.*

18. **Hamid Khanmohammadi**, Razyeh Arabahmadi, Template synthesis of an asymmetric phenol-based Macrocyclic dinuclear Cu(II) complex. **9<sup>th</sup>** *Iranian Inorganic Chemistry conference, 7-8 March 2007.*

19. **Hamid Khanmohammadi**, Mohammad Hossein Abnousei, and Hassan Keypour  
, Synthesis of some pyridine-based M(II) (M=Mn, Mg and Cd) heptaaza macrocyclic Schiff base complexes, with two 2-aminoethyl pendant arms and determination of their antibacterial-antifungal activity using disc diffusion method. **18<sup>th</sup>** *Iranian Physiology & Pharmacology Congress, 26-30th August 2007, Mashhad, Iran.*

20. Mohammad Hossein Abnousei , **Hamid Khanmohammadi** and Hassan Keypour  
, Antifungal and antibacterial activity of some Schiff base free ligands containing salicylaldehyde and/or substituted salicylaldehyde moiety and their Fe(III)



dinuclear complexes using disc zone diffusion method. **18<sup>th</sup> Iranian Physiology & Pharmacology Congress, 26-30th August 2007, Mashhad, Iran.**

21. Fatemeh Khodam, **Hamid Khanmohammadi**, Photocatalytic activity of ZnO and CdS nano particles for degradation of aromatic-based azo-azomethine,

**12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

22. Mahshid Saberinasab, **Hamid Khanmohammadi**, Synthesis and characterization of new trans-1, 2-diaminocyclohexane schiff base ligand containing azo group and its copper (II) complex, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

23. Fatemeh Khodam, **Hamid Khanmohammadi**, بررسی رفتار کاتالیزوری نانوذرات و در تخریب رنگ های پایه آروماتیک آزو- آزومتین در حضور تابش ماورای بنفش, *Emam Khomeini University Gazvine 10-12 July 2010, Gazvin,, IRAN.*

24. Alyeh Abollahi, **Hamid Khanmohammadi**, Photocatalytic degradation of new azo-azomethine diaminomaleonitril-based ligands by ZnO nano particle under UV irradiation, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

25. Alyeh Abollahi, **Hamid Khanmohammadi**, Synthesis and characterization of a new azo-azomethine diaminomaleonitrile-based ligand and its Ni(II) complex, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

26. Malihe Erfantalab, **Hamid Khanmohammadi**, Synthesis and characterization of new acyclic azo-azomethine triazole-based Silver (I) complex, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

27. Malihe Erfantalab, **Hamid Khanmohammadi**, Theoretical investigations on the Hydrogen NMR shielding and vibrational frequencies of new acyclic 1, 2, 4-triazole-based Schiff base ligand, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

28. Fakhr-o-sadat Mirnezami, **Hamid Khanmohammadi**, Ahmad Hamta, Synthesis, characterization and biological activity of copper(II) complexes of 1,2,4- triazole- based ligands, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

29. Fatemeh Khodam, **Hamid Khanmohammadi**, Synthesis and characterization of new Cd (II) complexes containing azo-azomethine ligands, **12<sup>th</sup> Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.**

30. Khatereh Rezaeian, **Hamid Khanmohammadi** Synthesis and characterization of new polydentate N, O azo-azomethine ligand and its Cu(II) complex,

<sup>12</sup>**th** *Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.*

31. Fatemeh Khodam, **Hamid Khanmohammadi**, Photocatalytic activity of ZnO and CdS nano particles for degradation of aromatic-based azo-azomethine,

<sup>12</sup>**th** *Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.*

32. Malihe Erfantalab, **Hamid Khanmohammadi**, New azo-azomethine dye and its copper complex: NMR and TD-DFT studies, <sup>15</sup>**th** Congress of Chemistry, 4-6 Sep 2011, *Hamedan University, Hamedan, IRAN*

33. Khatereh Rezaeian, **Hamid Khanmohammadi**, Photocatalytic activity of TiO<sub>2</sub> and ZnO nano particles for degradation of a new azo- azomethine dye in non-aqueous solution, <sup>12</sup>**th** *Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.*

34. Mahshid Saberinasab, **Hamid Khanmohammadi**, Synthesis and characterization of new azo-azomethine dyes and their computational studies, <sup>12</sup>**th** *Iranian Inorganic Chemistry Conference, 15-16 Sep 2010, Gilan University, Rasht, IRAN.*

35. Khatereh Rezaeian, Fatemeh Afsharnaderi, **Hamid Khanmohammadi**, Synthesis and spectroscopic characterization of three new azo-azomethine ligands with N<sub>2</sub>S<sub>2</sub>O<sub>2</sub> donor set of atoms and their Ni (II) complexes, <sup>14</sup>**th** *Iranian Inorganic Chemistry Conference, 28-29 Agu 2012, Sharif University, Tehran, IRAN.*

36. **Hamid Khanmohammadi**, Hadis Radaei, Syntheses and characterization of copper Complexes with azo-containing Schiff-base dyes, <sup>14</sup>**th** *Iranian Inorganic Chemistry Conference, 28-29 Agu 2012, Sharif University, Tehran, IRAN.*

37. **Hamid Khanmohammadi**, Hamed Adyanei *Synthesis and characterization of a new pyridine-based azo-azomethine ligand and its Cu (II) and Mn(III) complexes*, <sup>14</sup>**th** *Iranian Inorganic Chemistry Conference, 28-29 Agu 2012, Sharif University, Tehran, IRAN.*

38. **Hamid Khanmohammadi**, Maryam Pass, Khatereh Rezaeian, Synthesis and characterization of a new azo-azomethine ligand containing N<sub>2</sub>S<sub>2</sub>O<sub>2</sub> donor set of atoms and its Cu(II) complex, <sup>14</sup>**th** *Iranian Inorganic Chemistry Conference, 28-29 Agu 2012, Sharif University, Tehran, IRAN.*

39. **Hamid Khanmohammadi**, Mahshid Saberinasab, Tautomerism of new azo-azomethine ligand in the gas phase and in solution: TD-DFT study of the electronic spectra and thermodynamic parameter, <sup>15</sup>**th** *Iranian Physical Chemistry Conference, 3-6 Sep 2012, Tehran, IRAN.*

40. Mohammad Hossein Fekri, R. Aminameli, H. Shafie, M. Darvishpour, **Hamid Khanmohammadi**, Fe(III) ion selective electrode based on a new macrocyclic ionophore as a neutral carrier, *<sup>15</sup>th Iranian Physical Chemistry Conference, 3-6 Sep 2012, Tehran, IRAN.*
41. Khatereh Rezaeian, **Hamid Khanmohammadi**, Photocatalytic Activity of TiO<sub>2</sub> and ZnO Nano Particles for Decolorization of New Water-Insoluble Azo-Azomethine Dyes, *<sup>4</sup>th International Congress on Nanoscience and Nanotechnology, 8-10 Sep 2012, Kashan University, Kashan, IRAN.*
42. Fatemeh Khodam, **Hamid Khanmohammadi**, Catalytic Activity of Nano ZnO, CdS and CuO Particles for Photodegradation of Azo-azomethine Dyes in Light and UV Irradiation, *<sup>4</sup>th International Congress on Nanoscience and Nanotechnology, 8-10 Sep 2012, Kashan University, Kashan, IRAN.*
43. Malihe Erfantalab, **Hamid Khanmohammadi**, *Synthesis, EPR study, magnetic and thermal properties of new binuclear copper(II) complex of bis-triazole-based macrocyclic Schiff base hydrazone*, *<sup>16</sup>th Congress of Chemistry, 7-8 Sep 2013, Yazd University, Yazd, IRAN.*
44. Khatereh Rezaeian, Mansoreh Fakhari, **Hamid Khanmohammadi**, Synthesis and spectroscopic characterization of a new azoazomethine ligand with N<sub>2</sub>S<sub>2</sub>O<sub>2</sub> donor set of atoms and its Cu (II) and Ni (II) complexes, *<sup>16</sup>th Congress of Chemistry, 7-8 Sep 2013, Yazd University, Yazd, IRAN.*
45. Maryam Pass, **Hamid Khanmohammadi**, Golanreza Talei, *Synthesis and characterization of new chromone-based azo dyes: Complexes and their antimicrobial activities*, *<sup>16</sup>th Congress of Chemistry, 7-8 Sep 2013, Yazd University, Yazd, IRAN.*
46. Khatereh Rezaeian, **Hamid Khanmohammadi**, A highly selective colorimetric sensor for Ni (II) ion using N<sub>2</sub>S<sub>2</sub>O<sub>2</sub> Azo-azomethine derivative, *The <sup>16</sup>th Iranian Inorganic Chemistry Conference, 24-27 Sep 2014, Bu-Ali Sina University, Hamedan, IRAN.*
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