CURRICULUM VITAE

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EDUCATION

Ph.D. (1996 - 2002) Inorganic Chemistry, Kharazmi University (Teacher Training University),Tehran, Iran: **Thesis Title: Preparation and characterization of a novel self-assembling system containing pyridine ring and its complexes with metal ions; and synthesis of two macrocyclic ligands derived from pyridine**

M.Sc. (1993 - 1995) Inorganic Chemistry, Tehran University, Tehran, Iran: **Thesis Title: Synthesis and Characterization of amido complexes of Cu(I) and Ni(II) metal ions**

B.Sc. (1987 - 1991) Chemistry, Arak University, Arak, Iran

ACADEMIC POSITIONS

2002 To 2013: Assistant Professor in IROST
2014 To Date: Associate Professor in IROST
2017 To 2018: Visiting Professor at University of Stuttgart

EXECUTIVE EXPERIENCE

2009 To 2013: Head of the Inorganic Industries and Catalysts Division, Department of Chemical Technologies, Iranian Research Organization of Science and Technology (IROST)
2015 To 2016: Deputy Director for International Cooperation, IROST.

TEACHING EXPERIENCE AND COURCES

2002-2003: Teaching a course on **Chemical Application of Symmetry and Group Theory** Alzahra University, Tehran, Iran.
2012-2013: Teaching a course on **New Concepts on Inorganic Chemistry especially solid oxide fuel cells**, IROST, Tehran, Iran.
2012-2013: Teaching a course on **Advanced Inorganic Chemistry,** IROST Tehran, Iran.
2013-2014: Teaching a course on **Physical Inorganic Chemistry**, IROST Tehran, Iran.
2013-2014: Teaching a course on **Nanostructures: Synthetic methods,** IROST Tehran, Iran.
2013-2014: Teaching a course on **Nano Inorganic Compounds,** IROST Tehran, Iran.
2015-2016: Teaching a course on **Special Topics on Inorganic Chemistry**, Renewable energy focused of solar energy and fuel cells, IROST, Tehran, Iran.
2015-2016: Teaching a course on **Sonochemistry: Synthesis and Applications**, IROST, Tehran, Iran. And Azad University Science and Research Branch, Tehran Iran

2014-2014: Workshop on **ISI Paper Writing**, IROST and Institute of Color and Coating Technology Tehran, Iran.
2014-2015: Workshop on **New Achievement for Solid Oxide Fuel Cells**, IROST, Tehran Iran.
2019-2020: Teaching a course on **Nano Inorganic Compounds,** IROST Tehran, Iran.

RESEARCH PROJECTS

1. Fabrication of perovskite type solar cells based on ammonium lead halides, **2017**, IROST Tehran Iran.
2. Fabrication of proton exchange catalytic membrane for low temperature solid oxide fuel cells, INSF, 93033140**, 2016**, IROT Tehran, Iran
3. Production of phosphate ore two part binder, **2015**, IROST, Tehran, Iran
4. Anodic electro catalysis for low temperature solid oxide fuel cells**,** Iranian National Science Foundation, INSF, 90006825**, 2014**, IROT Tehran, Iran
5. Evaluation of materials and instruments for localization of solid oxide fuel cells 89/27, **2011** from SANA, IROST Tehran, Iran.
6. Preparation of lanthanum strontium manganite as cathode electrode for solid oxide fuel cells, 10102907, **2014,** from Presidential Technology Council, IROST Tehran, Iran.
7. Preparation and characterization of ruthenium complex of 2, 2'-bipyridine 4, 4'-dicarboxylic acid as dye for dye sensitized solar cells 101029028, **2014,** from Presidential Technology Council, IROST Tehran, Iran.
8. Nanosilica preparation from silica pyrometallurgical dusts and its uses in industry, **2008**, from Iran Nanotechnology Initiative Council, IROST Tehran, Iran.
9. New method for cobalt and cadmium recovery from waste materials of zinc manufacturing, **2005**, IROST, Tehran, Iran.
10. Preparation of a special type of charcoal briquette from waste charcoal powder, **2004**, from Ferrosilicon manufacture, Semnan, IROST Tehran, Iran.
11. Study of production iron fertilizer from Ochre, **2003**, from Khwarizmi University, IROST Tehran, Iran.
12. Optimization and a new method for crystallization of Aluminum fluoride from fluosilisic acid and hydrofluoric acid process, **2002**, IROST Tehran, Iran.
13. A novel process for production of Hydrofluoric acid from fluorspar in a rubber lined reactor at 80 ºC, **2000**, Ministry of Mines and Industries, IROST Tehran, Iran.
14. New method for production of Iron-EDDHA, **2000**, IROST Tehran, Iran.

Book

1. Solid Oxide Fuel Cell, Maryam Ranjbar, Majid Abdollahi, IROST, 256 pages, Iede Negar Publisher, 1395 (2016), Shabac: 978-600-94621-9-3.

JOINT RESEARCH PROJECTS

1. Methylal (Dimethoxymethane) production from methanol by heterogeneous nano catalysts, 2016, IROST Tehran, Iran (Assoc. Prof. Ali Eliassi).
2. Phenol degradation from waste water by catalytic ozonation, 2016, IROST, Tehran, Iran (Assoc. Prof. Soheila Shokrollarzadeh)
3. Production of organic zinc compound for use in poultry nutrition, 2015, IROST Tehran, Iran (Dr. Sara Mirzaee).
4. Synthesis of nano-sized gamma alumina for dimethyl ether (DME) production, 2011, IROST Tehran, Iran (Assoc. Prof. Ali Eliassi).
5. Synthesis of catalysts for Hydrogen production from methanol for Fuel Cells application, 2010, IROST Tehran, Iran (Assoc. Prof. Ali Eliassi).

STUDENT THESIS

1. Synthesis, characterization, and application of new imidazolate MOFs for adsorption of Cd, Ni, and Pb metal ions, PhD Project (Amir Khosravi), 2020, (as main supervisor with collaboration Dr Razieh Habibpour)
2. Synthesis and characterization of metal-organic frame work (MOF) based on imidazole derivatives and their application in removal of organic pollutants, PhD Project (Shabnam AliBakhshi), 2020, (Co supervisor).
3. Investigation of Metal Organic Frameworkseffects on Performance of Pervoskite Solar Cells, PhD Project (Mahsa Seifpanah), **2018** (as main supervisor with collaboration Dr Mohamad Abedi).
4. Fabrication and characterization of anode electrode from nickel oxide/gadolinium doped ceria for solid oxide fuel cells by new precursors, PhD Project (Somaye Ghamari), **2017**, (as main supervisor), IROST, Tehran, Iran.
5. Synthesis and characterization of new Ferritic hexagonal nanocomposites and their application, PhD Project (Saeid Mortazavi Nik), **2017** (as co supervisor) Science and Research Branch, Islamic Azad University, Tehran, Iran and IROST.
6. New achievement on perovskite type solar cells, PhD Project (Elham Maleki), **2017** (as co supervisor) Kashan University and IROST.
7. Synthesis and evaluation of Fe/Mo and Cu/Zn/ Al nanocatalyst for methylal and Hydrogen production PhD project (Ali Dehghani), **2016** (as main Supervisor), IROST.
8. Efficiency improvement of ZnO-based dye sensitizer solar cells PhD project (Elham Koohestanian), **2016** (as main Supervisor), IROST.
9. Preparation of cathodic nano structures LSM and LCNF from inorganic precursors for Solid Oxide fuel cells PhD project (Mostafa Yousefi), **2016** (as main Supervisor), IROST.
10. Preparation and Characterization of Barium cerate nano catalyst from new precursors MSc project (Parisa Esteghfari), **2015** (as main Supervisor) IROST.
11. Hydrogen production by methanol steam reforming in a micro-channel reactor coated with Cu-Zn-Ce-Al and Cu/Zn/Al spinel Catalyst MSc Project (Azadeh Parsaee) **2015** (as co supervisor), IROST.
12. Synthesis and characterization of new Fe_3O_4, Mn_3O_4 and Mn_3O_4/Fe_3O_4 nano catalysts for degradation of phenol by catalytic ozonation MSc Project (Marzie Bayat) **2015** (as main supervisor) IROST.
13. Catalytic ozonation by nano-ZnO/perlite for degradation of Remazol Black 5, MSc Project (Maseud Abbassi) **2016** (as main supervisor), IROST.
14. Synthesis and characterization of metal organic frameworks (MOF) by Cu and Zn aminoacids MSc Project (Roozbeh Aghaee Hakak) **2016** (as main supervisor), IROST.
15. Synthesis and investigation of MOFs nanoporous containing Ni and Cu, MSc Project (Nasim Saghafi kia) **2016** (as co-supervisor), IROST.
16. Effects of Gamma-Alumina Grain Size on Methanol Dehydration Dimethyl Ether (DME) on microchanel reactor, MSc Project (Leila Khoshrooyan) **2015** (as co-supervisor).
17. Preparation of NiO and CuO nanostructures by metal complexes as precursor for anodic row Materials of Solid Oxide Full cells" MSc Thesis (Marziya Taheriyan) **2013,** (as main supervisor), Shahre Rey Branch Azad University.
18. Preparation of cathodic row materials for SOFC by metal complexes as precursor, MSc Thesis (Mahsa Taghizadeh Mazandarani,) **2013,** (as main supervisor), Shahre Rey Branch Azad University.

19. Preparation and characterization of three components CuO/YSZ nanocomposite as raw anodic materials for SOFC, MSc thesis (Masoomeh Nabitabar) **2012,** (as main supervisor), Payam noor Abhar University.
20. Preparation of phosphor amine nano structures as dye for dye sensitized solar cells, MSc Project (Razie Shajareh Tooba) **2013** (as co-supervisor), Amir Kabir University.
21. Preparation of quantum dots CdS for dye sensitized solar cells, MSc student (Elham Maleki) **2012** (as co supervisor) Amir Kabir University.
22. Preparation and characterization of electrolyte to use in solid oxide fuel cell-zirconium oxide doped yttrium, MSc thesis (Soraya Manan) **2011** (as main supervisor), Shahre Rey Branch Azad University.
23. Preparation and characterization of zirconium oxide nano structures by metal complexes as precursor, MSc thesis (Masoomeh Lahooti) **2011**, (as main supervisor) Damghan University.
24. Preparation of zinc oxide using metal complexes as precursors, MSc project (Nasrin Shahsavan) **2011** (as main supervisor), Shahre Rey Branch Azad University.
25. Preparation of cadmium containing nano structures by using template effect, MSc project (Robabeh Nozari) **2010** (as main Supervisor) Shahre Rey Branch Azad University.
26. Preparation of mercury containing nano structures by using template effect MSc project (Elaheh Malakooti) **2010** (as main Supervisor) Shahre Rey Branch Azad University.
27. Preparation of metal containing nano materials by using template effect, MSc project (Afsaneh Behtash Oskooee) **2009** (as main Supervisor) Shahre Rey Branch Azad University.

PROFESSIONAL EXPERIENCES AND SKILLS

1- Synthesis of Solid Oxide Fuel Cells materials with controlled morphology
2- Synthesis of Quantum dot and Dye Sensitizer Solar Cell Materials with controlled morphology.
3- Production of Catalysts for alternative fuels.
4- Productions of Catalysts for waste water treatment.
5- Soft chemistry methods
6- X-ray single crystal method

INVITED SPEECHES

1. Maryam Ranjbar Ömer Çelik, Synthesis and characterization of Cu(II) and Pb(II) supra molecules: new precursors for CuO and PbO nanoparticles, 4th National Crystallographic Meeting with International Participation, 17-19 May, 2014, Diyarbakir, Turkey.
2. Maryam Ranjbar, Regulatory and Institutional Support Mechanisms/Framework and Critical Gaps in Testing, Standardization and Certification of Nanomaterials and Nanoproducts, Expert Group Meeting (EGM) on Testing, Standardization and Certification of Nanomaterials and Nanoproducts, 23 Jun 2014, Manila, Philipin.
3. M. Ranjbar, M. Nabitabar, Sonochemical Synthesis of Gadolinium Doped Ceria by New Precursors for Low and Intermediate Temperature Solid Oxide Fuel Cells, 15-17 Sept. 2014. Lisbon, Portugal.

PUBLICATIONS (2020-2001)

1- Ghamari S., Ranjbar M., **Effect of optimization on microstructures and performance of NiO-GDC anodes for solid oxide fuel cells**, *International Journal of Advances in Science Engineering and Technology* 8 (2020) 1-7.

2- E. Kouhestanian, M. Ranjbar, A. Mozaffari, H. Salar amoli**, Investigation of thickness effects on the performance of ZnO-based DSSC,** *Progress Color, Colorant and Coatings*, Under Review (2020).
3- Rouzbeh Aghaie Hakkak, Maryam Ranjbar, Sara Mirzaie, **Ultrasonic synthesis of Zn(II)methionine nanostructures: as precursor for ZnO nanoparticles and in vitro study,** *Journal of Particle Science and Technology, (*2020) in press.
4- M. Seifpanah, M. Abedi, M. Ranjbar, **Fabrication of lead Iodide perovskite solar cells by incorporating MOF-235 as additive in the one-step solution method**, *Solar Energy*, **2020**, Under construction.
5- Y.Songhak, S. Nikoee, M. Ranjbar, D. Ziegenbalg, M. Widenmeyer, A. Weidenkaff, **Strongly affected photocatalytic CO_2 reduction by adsorbed CO_2 on the surface of Cr-substituted $Ba_2In_2O_5{\cdot}(H_2O)_x$**, *Solid State Sciences*, (2020) Under Review.
6- E. Maleki, M Ranjbar ,S. A. Kahani, **Investigating the effect of the delay time of dripping antisolvent on morphology and structure of the perovskite layer and its application in the hole-transport material free perovskite solar cell**, *Progress Color, Colorant and Coatings*, Under Review (2020).
7- S. A. Kahani, E. Maleki, M. Ranjbar, **Investigating the effect of polythiocyanogen on morphology and stability of the perovskite layer and its application in the hole-transport material free perovskite solar cell**, Journal of Photochemistry and Photobiology A: Chemistry, 389(2019) 112218-112224, https://doi.org/10.1016/j.jphotochem.2019.112218**.**
8- S. Ghamari Arbati, M. Ranjbar, A. Babaei, **Fabrication of NiO-GDC anode from new precursor for IT-SOFCs by modifying the surface structure with a novel sol-gel process**, *Fuel Cells*, 2020 Submitted.
9- S. Ghamari Arbati, M. Ranjbar, **Investigation of catalytic activity of modified morphology NiO/GDC synthesized by sol-gel method as SOFC anode materials**, *Journal of Macromolecular Science Part A-Pure and Applied Chemistry*, (2020) Submitted.
10- M. Seifpanah Sowmehesaraee, M. Ranjbar, Mohammad Abedi, **Fabrication of Lead Iodide Perovskite Solar Cells by Incorporating Zirconium, Indium and Zinc Metal-Organic Frameworks**, *Journal of Photochemistry and Photobiology A: Chemistry*, (2020) Submitted.
11- S. Shokrollahzadeh, M. Abassi, M. Ranjbar, A new nano-ZnO/perlite as an efficient catalyst for catalytic ozonation of azo dye, *Environ. Eng. Res*. 24 (2019) 513-520.
12- S. Mortazavinik, M. Yousefi, M. Ranjbar, P. Aberoomand Azar, M. Hossaini Sadr, **Synthesis, characterization and investigation of magnetic and microwave absorbing properties of polyaniline /$SrFe_{11.1}(ZrZn_{0.5}Co_{0.5})_{0.45}O_{19}$/MWCNTs nanocomposite**, JACR-1801-1433 (R1), Pazhooheshhaye Karbordi Dar Shimi, (2019) 149-155. (In Persian language).
13- M. Ranjbar, M. Yousefi, R. Nouzari, S. Sheshmani, Synthesis, **Characterization and Crystal Structure of Cadmium(II) Nano Coordination Compound: A Precursor to Produce Nano-Sized Cadmium Oxide and Cadmium Iodide**, Journal of Applied Chemistry 13 (2019) 89-101.
14- MR Jamei, M. Ranjbar, A. Eliassi**, Introduction to catalysts for conversion of methanol to methylal** *New Processes (Farayand e No)***, In Press** (2019) (In Persian language).
15- M Bayat, M Ranjbar, S Shokrollahzadeh, **Synthesis and characterization of Mn_3O_4 nano catalysts for degradation of phenol by catalytic ozonation,** *Journal of Iranian Chemical Engineering (Nashrie Mohandesi Shimi Iran), 2* (2019) 13-20. (In Persian language).
16- A Parsaee, A Eliassi, M Ranjbar, E. Kashi, **Preparation of Cu-Zn-Ce-Al Spinel Catalyst for Hydrogen Production in Micro-Chanel Reactor and Considering the Geometrical Effectys of Micro-Chanels on Velocity Distribution**, *Journal of Applied Chemistry*, 12 (2018) 71-81.
17- S. Ghamaria, M. Nabitabara, M. Ranjbar, **Study the properties of gadolinium doped ceria nano-powders synthesized via sol-gel method with new precursors**" Iranian Journal of Science and Technology, Transactions A: Science, https://doi.org/10.1007/s40995-017-0270-5. Iran J Sci Technol Trans Sci (2018) 42:1969-1976.
18- A. Dehghani, M. Ranjbar, A. Eliassi, **Modification of $Cu/Zn/Al_2O_3$ catalyst by activated carbon based metal organic frameworks as precursor for hydrogen production,** *J. Inorg. Organomet. Polym***.** 28 (2018) 585-593. https://link.springer.com/article/10.1007%2Fs10904-017-0678-6.
19- A. Dehghani, M. Ranjbar, A. Eliassi, **Novel Porous Iron Molybdate Catalysts for Synthesis of Dimethoxymethane from Methanol: Metal Organic Frameworks as Precursors,** *Nanochemistry Research* 3 (2018) 50-61.
20- S. Ghamari, M. Ranjbar, M. Nabitabar, **Preparation and characterization of nanopowder nickel oxide/gadolinium-doped ceria via the sol-gel method by NiLH2 precursor,** *J Sol-Gel Sci Technol* 81 (2017) 236–246.
21- M. Yousefi and M. Ranjbar, **Ultrasound and Microwave-Assisted Co-precipitation Synthesis of $La_{0.75}Sr_{0.25}MnO_3$ Perovskite Nanoparticles from a New Lanthanum(III) Coordination Polymer Precursor**, *J. Inorg. Organomet. Polym***.** 27 (2017) 633-640.

22- MR. Jamei, M. Ranjbar, A. Eliassi, **Sonochemical Synthesis of Vanadium Complex Nano-Particles: A New Precursor for Preparation and Evaluation of V_2O_5/Al_2O_3 Nano-Catalyst in Selective Oxidation of Methanol to Methylal,** *Journal of Iranian Chemical Society* 14 (2017) 2627–2635.

23- M Ranjbar, M. Yousefi, **Facile Preparation of Zirconia Nanostructures by New Method: Nano-Scale Zirconium(IV) Coordination Supramolecular Compound as Precursor,** *Iran. J. Sci. Technol. Trans. Sci.* (2017) 1-11**,** doi:10.1007/s40995-016-0069-9.

24- M Ranjbar, M Yousefi, N Shahsavan, M Yousefi, L Erikson, **Sonochemical synthesis and characterization of nano-sized zinc(II) supramolecular compound as a precursor for thepreparation of pure-phase zinc(II) oxide nanoparticles,** *Nanochem. Res.*,2 (2017) 120-131.

25- F. Hajmohammadi, Z. Soleimani, J. Hemmat, N. Kazemimejad, AR. Sedrpoushan, M. Ranjbar, M. Heydari, A. Parach, **Studies of antibacterial effects of synthesized silver nanoparticles using a novel thermotolerant Isoptericola variabilis sp. IRSH1 against Staphylococcus aureus and Pseudomonas aeruginosa,** J Qazvin Univ Med Sci. 2017; 21 (3): 23-30.

26- M. Ranjbar and M. Yousefi, **Sonochemical Synthesis and Characterization of a Nano-Sized Lead(II) Coordination Polymer; A New Precursor for the Preparation of PbO Nanoparticles,** Int. J. Nanosci. Nanotechnol., 12 (2016) 109-118.

27- E. Kouhestanian, A Mozafari, M. Ranjbar, H. Salar Amoli, MH Armanmehr**, Electrodeposited ZnO thin film as an efficient alternative blocking layer for $TiCl_4$ pre-treatment in TiO_2 based dye sensitized solar cells,** *Superlattices and Microstructures*, 96 (2016) 82-94.

28- M Ranjbar, A Mozaffari, E Kouhestanian, H Salar Amoli, **Sonochemical synthesis and characterization of a Zn(II) supramolecule, bis(2,6 diaminopyridinium)bis(pyridine-2,6-dicarboxylato)zincate(II), as a novel precursor for the ZnO-based dye sensitizer solar cell,** *Journal of Photochemistry and Photobiology A: Chemistry* 321 (2016) 110-121.

29- A Mozafari, M. Ranjbar, E. kouhestanian, H. Salar Amoli, MH Armanmehr**, An investigation on the effect of electrodeposited nanostructured ZnO** *Materials Science in Semiconductor Processing* 40 (2015) 285-292.

30- A Parsaee, A Eliassi, M Ranjbar, **Considerations about the production of hydrogen by steam reforming of methanol in a microchannel reactor coated with catalyst,** *Journal of Iranian Chemical Engineering (Nashrie Mohandesi Shimi Iran)* 15 (2016) 53-65. (In Persian language).

31- M. Ranjbar, M. Yousefi, M. Lahooti, SH. Mahmoudi Najafi, A. Malekzadeh, **Synthesis of pure monoclinic zirconia nanoparticles using ultrasound cavitation technique**, *Journal of Particle Science and Technology* 2 (2016) 69-77.

32- Leila Khoshrooyan, Ali Eliassi, Maryam Ranjbar, **Effects of catalyst particle size on methanol dehydration at different temperatures and weight hourly space velocities**, *Journal of Particle Science and Technology* 2 (2016) 41-47.

33- M Ranjbar, M Yousefi**, Sonochemical synthesis and characterization of a nano-sized lead(II) coordination polymer; A new precursor for the preparation of PbO nano-structure**, *J. Inorg. Organomet. Polym***.** 24 (2014) 625-655.

34- M Ranjbar, M Nabitabar, Ö Çelik and M Yousefi **Sonochemical synthesis and characterization of nano-structured copper(I) supramolecular compound as a precursor for the fabrication of pure phase copper oxide nanoparticles**, *J Iran Chem. Soc*. 12 (2014) 551-559**.**

35- M Ranjbar, M Lahooti, M Yousefi, A Malekzadeh**, Sonochemical synthesis and characterization of nano-sized zirconium(IV) complex: new precursor for the preparation of pure monoclinic and tetragonal zirconia nanoparticles,** *Iran Chem. Soc.* 11 (2014) 1257-1264.

36- M Ranjbar, M Yousefi**, Synthesis and characterization of lanthanum oxide nanoparticles from thermolysis of nano-sized lanthanum(III) supramolecule as a novel precursor,** *J. Inorg. Organomet. Polym***.** , 24 (2014) 652-655.

37- A Eliassi and M Ranjbar**, Application of Novel Gamma Alumina Nano Structure for Preparation of Dimethyl ether from Methanol,** *International Journal of Nanoscience and Nanotechnology, IJNN* (2014), 13-26.

38- H Salaramoli, E Maleki, Z Shariatinia, M Ranjbar**, CdS/CdSe quantum dots bco-sensitized solar cells with Cu2S counter electrode prepared by SILAR, spray pyrolysis and Zn-Cu alloy methods,** *Journal of Photochemistry and Photobiology A*: *Chemistry***,** 271 (2013) 56-64.

39- M Ranjbar, M Yousefi, R Nozari, S Sheshmani, **Synthesis and Characterization of Cadmium-Thioacetamide Nanocomposites Using a Facile Sonochemical Approach: A precursor for Producing CdS Nanoparticles via Thermal Decomposition,** *International Journal of Nanoscience and Nanotechnology*, IJNN, 2013, 203-212.

40- M Ranjbar, M Yousefi, M Lahooti, A Malekzadeh, **Preparation and Characterization of Tetragonal Zirconium Oxide Nanocrystals from Isophthalic Acid-Zirconium(IV) Nanocomposit**, *International Journal of Nanoscience and Nanotechnology*, IJNN, 2012, 191-196.

41- M Ranjbar, S Mannan, M Yousefi and Anvar Shalmashi **"Yttria Nanoparticles Prepared from Salicylic Acid-Y(III) Nanocomposite as a New Precursor"** *American Chemical Science Journal*, 3 (2013) 1-10.

42- M Ranjbar, E Malakooti, S Sheshmani, **Synthesis and Characterization of Mercury(II) Complexes Containing 2,9-Dimethyl 1,10-Phenantroline by Sonochemical Method,** *Journal of Chemistry*, **(**2013) 1-6.

43- M Ranjbar, N Shahsavan, M Yousefi, A Shalmashi, "**Synthesis and Characterization of Salicylic Acid Yttrium(III) Nano Composite: A New Precursor for Y_2O_3 Nano Structures"** *American Chemical Science Journal*, 3 (2012) 1-10.

44- M Ranjbar, N Shahsavan, M Yousefi**, Synthesis and Characterization of Nano Structured Zinc(II) Cysteine Complex Under Ultrasound Irradiation,** *American Chemical Science Journal*, 2 (2012) 111-121.

45- M. Ranjbar, S. H. Mahmoudi Najafi, N. Shahsavan, M. Yousefi," **Synthesis of Zinc(II) Oxide Wurtzite Nano Crystals Via Zn(II) Minoxidil Nanocomposite as a New Precursor"** *International Journal of Nanoscience and Nanotechnology, IJNN*, (2011) 147-152

46- M. Ranjbar, Ö. Çelik, S. H. Mahmodi Najafi, S. Sheshmani · N. Akbari Mobarakeh, **Synthesis of Lead(II) minoxidil Coordination Polymer : A new Precursor for Lead(II) Oxide and Lead(II) Hydroxyl Bromide,** *J. Inorg. Organomet. Polym.*, 22 (2012) 837-844.

47- M. Ranjbar,S. H. Mahmoudi Najafi, and Seik Weng Ng, **Catena-Poly[lead(II)-[l-2,4-diamino6-(piperidin-1-yl)pyrimidine N-oxide**, *Acta Cryst*. (2009). E 65, m749.

48- M. Ranjbar, "**Short review on sorces, applications and methods for cadmium recovery**" *Iranian Chemical Enginneering Journal*, 1378, No. 36, 54-67 (In Persian Language).

49- B. Ranjbar, and M. Ranjbar,"**Nanosilica application in rubber industry**", *Iranian Journal of polymer*, 48 (2006) 46.

50- M. Rafizadeh, M. Ranjbar, and V. Amani, **" Crystal structure of Gadolinium complex, Dihydronium 2,6-diaminopyridinium tris(2,6-pyridinedicarboxylato) gadolinium(III) dehydrate, $C_{31}H_{34}GdN_9O_{16}$** , *Anal. Sci*. 21 (2005) x113

51- H. Aghabozorg, A. Moghimi, F. Manteghi, M. Ranjbar ,"**A Nine-Coordinated Zr^{IV} Complex and a Self-Assembling System Obtained from a Proton Transfer Compound Containing 2,6-Pyridinedicarboxylate and 2,6-Pyridinediammonium; Synthesis and X-ray Crystal Structure",** *Z. Anorg. Allg. Chem.*631(2005) 909.

52- M. Abdollahi, M. Ranjbar, "**Aplication of siliconedioxide nanoparticles in concrete**" *Cement Magazine*, 90 (2004) 48 (In Persian Language).

53- M. Ranjbar and H. Aghabozorh, "**Crystal Structure of a Polymeric Hg(II) complex of a Pyridine Containing a Self-Assembling System"** *Anal. Sci*. 20 (2004) x153.

54- A. Moghimi, S. Shokrollahi, M. Shamsipur, H. Aghabozorg, M. Ranjbar, "**X- Ray Crystal Structure and Solution Study of Hexa coordinate Mercury(II) Complex of a Pyridine Containing Poroton Transfer Compound"** *J. Mol. Struct***.** 701 (2004) 49-56**.**

55- M. Ranjbar, M. Abdollahi, M. Rafizadeh" **Crystal Structure of a Seven-Coordinate Thallium(III) Complex, 2,6-Diaminopyridinumbis(2,6-pyridinedicarboxylato)aqua thallate(III)tetrahydrate"** *Anal. Sci*. 20 (2004) x133.

56- M. Ranjbar" **Crystal Structure of a Five-Coordinate Vanadium(V) Complex, 2,6- Diamino pyridinum 2,6-pyridinedicarboxylatodioxovanadate(V)"** *Anal. Sci*. 20 (2004) x135.

57- M. Ranjbar, M. Abdollahi, **"An Introduction to Nonporous Materials"** *Iranian journal of Polymer* , 35 (**2004)** 60 (In Persian Language).

58- M. Rafizadeh, M. Ranjbar, and V. Amani," **Dihydronium 2,6-diaminopyridinium tris(2,6-pyridinedicarboxylato)ytterbate(III) dihydrate**" *Acta Cryst.* (2004) m479-m481.

59- M. Ranjbar, H. Aghabozorg and A. Moghimi," Synthesis and Crystal Structure of Bis(2,6-diaminopyridinium) tetrachloro palladate(II) of a Pyridine Containing Self-Assembling System " *Iranian Journal of Crystallography and Mineralogy* , 2 (2003) 197-205.

60- M. Ranjbar, H. Aghabozorg and A. Moghimi," **Crystal Structure of a Binuclear Seven-Coordinate Tin(IV) Complex** *Anal. Sci*. 19(2003) x71.

61- M. Ranjbar, H. Aghabozorg and A. Moghimi," **Crystal structure of bis(2,6- diaminopyridinum) diaqua-bis-(2,6-pyridinedicarboxylato) dibismuthate(III)-) tetrahydrate, $(C_{28}H_{16}O_{18}N_4Bi_2)(C_5H_8N_3)_2.4H_2O$** *Z. Kristallogr. NCS* 218 (2003) 432.

62- M. Ranjbar, H. Aghabozorg and A. Moghimi," **Crystal structure of bis(2,6- diaminopyridinum) tetrachloro palladate(II), $C_{10}H_{16}Cl_4N_6Pd$**" *Z. Kristallogr. NCS* 218 (2003) 75.

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