

Mahdi Mirzaee
Associate Professor of Inorganic Chemistry



**Department of Chemistry, Shahrood University of Technology,
Shahrood, Semnan, Iran**

Phone No. : +98-23-32392204(-9)-2256 (from 8am to 4pm)
E-Mail: mmirzaee@shahroodut.ac.ir & doctormirzaee@gmail.com

EDUCATION

Ph.D. of Inorganic Chemistry, 2007

Shahid Beheshti University
Tehran, Iran

Thesis Title: Preparation, Stabilization and Characterization of Some Metal Alkoxide and Investigation of Their Hydrolysis by Hydrothermal Assisted Sol-Gel Processing

Experienced in synthesis and characterization of inorganic and organometallic compounds. Extensive experience in synthesis of air and moisture sensitive compounds by schelink techniques.

Master in Inorganic Chemistry, 2001.

Shahid Beheshti University
Tehran, Iran

Thesis Title: Synthesis of Zeolite X by Clay Conversion and it's Application in Catalytic Reactions

Worked with X-ray diffraction and IR spectrometer. Experience in synthesis of various porous materials and catalytic reaction.

Bachelor in Applied Chemistry, 1998

Isfahan University of
Technology, Isfahan, Iran

Experienced in recovering DMT production catalyst, electrolysis reactions, and making fluorine sensitive electrode from hydroxyapatite and human tooth.

TEACHING EXPERIENCE

Teaching, General chemistry (I), 2007-present Shahrood University of Technology,
Teaching, General chemistry (I, II) Lab., 2007-present Shahrood
Teaching, Inorganic chemistry (I, II) Lab., 2008-present Semnan, Iran
Teaching, Solid state and surface chemistry, 2008-present
Teaching, Advanced inorganic chemistry, 2008-present
Teaching, Application of physical methods in inorganic chemistry, 2009-present
Teaching, Inorganic Spectroscopy, 2009-present
Teaching, Inorganic chemistry (I, II, III), 2009-present
Teaching, Chemical application of group theory, 2009-present
Teaching, Solid state chemistry, 2009-present
Teaching, How to present seminar, 2012-present
Teaching, Inorganic polymer, 2013-present
Teaching, Specific trends in inorganic chemistry, 2013-present
Teaching, Safety in chemical laboratory, 2015-present

Teaching, General chemistry, 2013-present Shahrood University of Medical
Teaching, General chemistry Lab., 2013-2015 Science, Shahrood,
Semnan, Iran

Teaching, Inorganic chemistry (I, II), 2004-2008 Islamic Azad University
Teaching, Organometallic chemistry, 2005-2008 Varamin-Pishva Branch
Teaching, Chemical application of group theory, 2005-2008 Pishva, Tehran, Iran
Teaching, General chemistry (I, II), 2005-2008
Teaching, Inorganic chemistry (I, II) Lab., 2004-2008
Teaching, General chemistry (I, II) Lab., 2004-2008

Teaching assistant, Inorganic chemistry, 1999-2007 Shahid Beheshti University
Teaching, Inorganic chemistry Lab., 2001-2007 Tehran, Iran
Lab. assistant, guiding BS. and MS. students, 2001-2007

Teaching assistant, Organic chemistry Lab., 1996-1998 Isfahan University of
Technology, Isfahan, Iran

PERSONAL

Married, 1 child
Birth Date: 23 August, 1975
Hobby: Gardening
Father's Name: Hasan
Nationality: Iranian
Communication Language: Persian and English

LIST OF PUBLICATION

A: Book

[1] Advanced Catalytic Materials, edited by Ashutosh Tiwari and Salam Titinchi Part 2, Chapter 7, page 225-270: Catalytic Performance of Metal Alkoxides *WILEY-Scrivener Publishing, USA*, 2015, DOI: 10.1002/9781118998939.ch7

B: Paper

[56] Chitosan-based synthesis of silver-doped tungsten oxide nanoparticles and assessment of its cytotoxicity and photocatalytic performance.

Journal of Photochemistry and Photobiology A: Chemistry, 2024, 448, 115323.

[55] Design of a ternary magnetic composite based on a covalent organic framework and Ag nanoparticles for simultaneous photodegradation of organic pollutants under LED light irradiation: Application of BBD-RSM modeling and resolution of spectral overlap of analytes.

Journal of Alloys and Compounds, 2023, 946, 171249.

[54] Fabrication of perovskite@MOF composites as an alternative for noble metal catalysts in hydrogenation of nitroarenes: an investigation of transition metals doping on catalytic performance and RSM modelling of reaction conditions.

Journal of Molecular Structures, 2023, 1283, 135322.

[53] Design of an S-scheme photo-catalyst utilizing a Cu-doped perovskite and MOF-5 for simultaneous degradation of organic pollutants under LED light irradiation: Application of EXRSM method for spectra separation and BBD-RSM modeling.

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 2023, 287, 122116.

[52] Green synthesis of tungsten oxide (WO₃) nanosheets and investigation of their photocatalytic and cytotoxicity effects.

Micro & Nano Letters, 2022, 17, 286-298.

[51] Fabrication of a magnetic composite by CoFe_2O_4 and an inorganic polymer for simultaneous photo-degradation of organic pollutants under visible LED light: Bandgap engineering, CCD-RSM modeling, and resolving spectral overlap of analytes. *Journal of Molecular Liquids*, 2022, 362, 119692.

[50] Supporting $\text{H}_5[\text{PMo}_{10}\text{V}_2\text{O}_{40}]$ and $\text{H}_5[\text{PW}_{10}\text{V}_2\text{O}_{40}]$ Heteropolyacids onto the Surface of Amine-functionalized Boehmite Nano-particles for Catalytic Epoxidation of Alkenes. *Inorganic Chemistry Research*, 2020, 4(2), 201-212.

[49] $\text{VO}(\text{acac})_2$ Supported on Ethylenediamine Functionalized Hydrous Zirconia Nano-Particles for Catalytic Epoxidation of Alkenes. *Inorganic Chemistry Research*, 2020, 4(2), 183-193.

[48] Ultrasensitive Fluorescent miRNA Biosensor Based on a “Sandwich” Oligonucleotide Hybridization and Fluorescence Resonance Energy Transfer Process Using an Ln(III)-MOF and Ag Nanoparticles for Early Cancer Diagnosis: Application of Central Composite Design. *ACS Applied Materials and Interfaces*, 2020, 12, 16076-16087.

[47] Role of oxygen vacancies on photo-catalytic activities of green synthesized Ceria nanoparticles in *Cydonia oblonga miller* seeds extract and evaluation of its cytotoxicity effects. *Journal of Alloys and Compounds*, 2020, 816, 152553.

[46] Phthalocyanine Complex Supported on Polysilsesquioxane: A New and Efficient Catalyst for Oxidation of Benzyl Alcohol. *Journal of Applied Chemistry*, 2019, 14(52), 135-148.

[45] Schiff base functionalized Fe_3O_4 @Boehmite Core-Shell Nano-Particles to Support $\text{MoO}_2(\text{acac})_2$ for Catalytic Epoxidation of Alkenes. *Journal of Advanced Materials and Processing*, 2019, 7(1), 31-42.

[44] Preparation and characterization of nano-AgI/poly-mercaptopropyl-methyl-silsesquioxane and investigation of its photo-catalytic activity for Rhodamine B degradation under visible light irradiation.

Materials Science & Engineering B, 2019, 246, 80-88.

[43] Bio-based synthesis of Nano-Ceria and evaluation of its bio-distribution and biological properties.

Colloids and Surfaces B: Biointerfaces, 2019, 181, 830-836.

[42] Preparation and characterization of Fe₃O₄@Boehmite core-shell nanoparticles to support molybdenum or vanadium complexes for catalytic epoxidation of alkenes.

Applied Organometallic Chemistry, 2019, 33(4), e4792, 1-14.

[41] Phthalocyanine Complex Supported on Polysilsesquioxane: A New and Efficient Catalyst for Oxidation of Benzyl Alcohol.

Journal of Applied Chemistry, 2019, 14(52), 135-148.

[40] Preparation of cerium oxide nanoparticles in *Salvia Macrosiphon Boiss* seeds extract and investigation of their photo-catalytic activities.

Ceramics International, 2019, 45, 4790-4797.

[39] Molybdenum Containing Catalysts Grafted on Functionalized Hydrous Zirconia Nano-particles for Epoxidation of Alkenes.

Catalysis Letters, 2018, 148, 3003–3017.

[38] Preparation and characterization of micro-spherical poly-organosilsesquioxane immobilized ligand systems to support MoO₂(acac)₂ and investigation of their catalytic properties in epoxidation of alkenes.

Journal of Sol-Gel Science and Technology, 2018, 85, 664-676.

[37] Boehmite Nano-particles functionalized with Silylpropylamine Supported Keggin Type Heteropolyacids: Catalysts for Epoxidation of Alkenes.

Applied Organometallic Chemistry, 2018, 32, e4011, 1-9.

[36] Hydrothermal Assisted Sol-Gel Process on Binary Mixtures of Aluminum and Titanium Alkoxides: A Novel Route for the Fabrication of Single Phase Tialite. *Journal of Advanced Materials and Processing*, 2017, 5(3), 73-81.

[35] Palladium-free and phosphine-free Sonogashira coupling reaction of aryl halides with terminal alkynes catalyzed by boehmite nanoparticle-anchored Cu(I) diethylenetriamine complex. *Research on Chemical Intermediates*, 2017, 43 (12), 7347-7363.

[34] Synthesis of new 2-substituted pyrazolo[5,1-b][1,3]oxazoles via Sonogashira coupling reactions in water. *Tetrahedron*, 2017, 73, 3281-3287.

[33] Boehmite Silylpropyl Amine Sulfamic Acid as an Efficient and Recyclable Catalyst for the Synthesis of some Pyrazole Derivatives. *Letters in Organic Chemistry*, 2017, 14, 450-460.

[32] Synthesis of pyrazolopyranopyrimidines catalyzed by caffeine supported on boehmite nanoparticles and their evaluation for anti-bacterial activities. *Iranian Journal of Catalysis*, 2017, 7(1), 27-35.

[31] Development of an unexpected reaction pathway for the synthesis of 1,2,4-trisubstituted pyrrolo[1,2-a]quinoxalines through palladium-catalyzed cascade reactions. *Tetrahedron*, 2017, 73(12), 1633-1639.

[30] Acetylacetonate complexes of vanadium and molybdenum supported on functionalized boehmite nano-particles for the catalytic epoxidation of alkenes. *Chemical Engineering Journal*, 2017, 308, 160-168.

[29] Amine-functionalized boehmite nanoparticle-supported molybdenum and vanadium complexes: Efficient catalysts for epoxidation of alkenes. *Chinese Journal of Catalysis*, 2016, 37(8), 1263-1274.

[28] Schiff base-functionalized boehmite nanoparticle-supported molybdenum and vanadium complexes: efficient catalysts for the epoxidation of alkenes.

Applied Organometallic Chemistry, 2015, 29, 593-600.

[27] Boehmite nanoparticle catalyst for the one-pot multicomponent synthesis of 3,4-dihydropyrimidin-2-(1H)-ones and thiones under solvent-free conditions.
Chinese Journal of Catalysis, 2014, 35, 362-367.

[26] Synthesis, characterization and molecular structure of titanium alkoxide complexes with aromatic oxime ligands.
Transition Metal Chemistry, 2014, 39(1), 55–62.

[25] Synthesis, Characterisation, and X-Ray Crystal Structures of 8-Hydroxyquinoline Complexes of Group IV Metal Alkoxides.
Australian Journal of Chemistry, 2013, 66, 1587– 1593.

[24] Boehmite nanoparticles, an efficient green catalyst for the multi-component synthesis of highly substituted imidazoles.
Applied Catalysis A: General, 2013, 467, 291– 300.

[23] The crystal structure of μ -Oxo-bis{diethoxy[salicylaldoximato(2-)]-tantalum(V)}
Comptes Rendus Chimie, 2011, 14, 927-933.

[22] Synthesis, Characterization and Single Crystal Structure Determination of Aluminum Alkoxydisilanolates: Precursors for Silica-Alumina Composite.
Applied Organometallic Chemistry, 2010, 24, 431-438.

[21] Commercial Zinc Oxide (Zn^{2+}) as an Efficient and Environmentally Benign Catalyst for Homogeneous Benzoylation of Hydroxyl Functional Groups.
Chin. J. Chem., 2010, 28, 1247-1252.

[20] Effect of Solvent and Temperature on the Preparation of Potassium Niobate by Hydrothermal Assisted Sol-Gel Processing.
Ceramics International, 2009, 35, 2367-2372.

[19] Simple and efficient approach for the synthesis of nanocrystalline boehmite via hydrothermal assisted sol-gel processing.
Asian Journal of Chemistry, 2008, 20(2), 915-924.

[18] Synthesis, single crystal structure determination, and solution behavior of an 8-hydroxyquinoline derivative of niobium(V) ethoxide.
Transition Metal Chemistry, 2008, 33, 79 - 83.

[17] The Effect of Solution Chemistry on The Preparation of $MgAl_2O_4$ by Hydrothermal Assisted Sol–Gel Processing.
Materials Research Bulletin, 2007, 42, 563-570.

[16] Synthesis, Structure and Luminescence Study of a Binuclear Aluminium Complex: A Novel Structure Containing Six Coordinated Aluminium Atoms in Two Distinct Coordination Geometries.

Polyhedron, 2006, 25, 3231-7.

[15] Synthesis and Characterization of a tetrakis(8-quinolinato)Zirconium from Zirconium propoxide.

Kharazmi Journal of Chemistry 2005, 2, 47-54.

[14] Effect of Solution Chemistry on Preparation of Boehmite by Hydrothermal Assisted Sol-gel Processing of Al Alkoxides.

J. Sol-gel Sci. Technol. 2005,36,19-23.

[13] Oxotris(quinoline-8-olato- $\kappa^2 O,N$)tantalum(V) dichloromethane disolvate.

Acta Cryst. 2005, E61, m1053-m1054.

[12] Preparation of γ -Alumina from Aluminum Alkoxyaminates.

Ceramic Silikaty, 2005, 49, 2, 138-141.

[11] Preparation and Characterization of Boehmite, CuO, TiO₂ and Nb₂O₅ by Hydrothermal Assisted Sol-gel Processing of Metal Alkoxide.

Ceramic Silikaty, 2005, 49, 1, 40-47.

[10] Synthesis, Spectroscopic and X-ray Single Crystal Structure Study of bis(2-methoxy-ethanalato)-bis(8-quinolinato)titanium(IV).

Applied Organometallic Chemistry, 2005, 19, 3, 339-342.

[9] Di- μ -isopropoxy-bis[(8-hydroxyquinolinolato)diisopropoxyzirconium(IV)].

Acta Cryst. 2004, E60, m1053-m1054.

[8] Tris(8-hydroxyquinolinato- $\kappa^2 O,N$)Oxonioibium(V) dichloromethane disolvate.

Acta Cryst. 2004, E60, m147-m148.

[7] Di- μ -ethoxy-bis[diethoxy(8-quinolinato)titanium(IV)].

Acta Cryst. 2004, E60, m145-m146.

[6] μ -Oxo-bis{ dietoxy[salicylaldoximato(2-)]niobium(V)}.

Acta Cryst. 2004, E60, m53-m55.

[5] Bis[1,1,3,3-tetrametyl-1,3-bis(dichloroacetato)distannoxane].

Acta Cryst. 2003, E59, m876-m877.

[4] catena-Poly[μ -trifluoroacetato-O:O'-dimethyl-4-fluorophenyltin(IV)].

Acta Cryst. 2003, E59, m847-m848.

[3] Bis(1,1,3,3-tetrametyl-1,3-dibenzoatodistannoxane).

Acta Cryst. 2002, E58, m697-m699.

[2] catena-Poly[μ -trifluoroacetato-O:O'-dimethylphenyltin(IV)].

Acta Cryst. 2002, E58, m650-m652.

[1] Ability of Tailored Semnan Clinoptilolite in Removal of Hexavalent Chromium Ions From Industrial Wastewater.

Research Journal of Chemistry and Environment, 2000, 4, 4, 61-67.

C: Patents

[9] Preparation of Iron Oxide Magnetic Nano-particles Coated with Boehmite and Its Application as Catalytic Bed for the Epoxidation of Cis-cyclooctene with Vanadium and Molybdenum Complexes.

No.87210, November 2015.

[8] Preparation of Molybdenum and Vanadium Catalysts Supported on Fe₃O₄ Magnetic Nano-particles@Boehmite and Their Application in Catalytic Epoxidation of Alkenes.

No.84730, January 2015.

[7] Preparation of Molybdenum and Vanadium Schiff Base Complexes Supported on Nano-Boehmite for the Catalytic Epoxidation of Alkenes.

No.83824, September 2014.

[6] Preparation of zinc aluminate (gahnite) nano-particles by hydrothermal assisted sol-gel process.

No.83399, July 2014.

[5] Preparation and Characterization of Heteropoly Acids Supported on Functionalized Nano-Boehmite for the Catalytic Epoxidation of Alkenes.

No.83356, July 2014.

[4] Preparation and Characterization of Keggin Heteropoly Acids Supported on Functionalized Nano-Boehmite for the Production of Biodiesel.

No.83355, July 2014.

[3] Preparation of Magnesium Aluminate Spinel as Monolithic Gel and Bodies by Single-Source Precursor of Aluminium Magnesium Methoxy Ethoxy Ethoxide.

No.83012, June 2014.

[2] Preparation of Metalated Functionalized Nano-Boehmite as a Green Catalyst for the Epoxidation of Alkenes.

No.81040, November 2013.

[1] Application of Aluminum Waste for the Preparation of Aluminum Alkoxides and Using of Them as Precursors of Nano-Boehmite Adsorbent and Catalytic Bed.

No.80630, September 2013.

D: International Conferences and Seminars

[9] Vanadium-oxo-Sulphate and Molybdenum Hexa-Carbonyl Supported on Silyl Amine Functionalized Nano-Boehmite as a Green Catalyst.

Advanced Materials World Congress (AMWC 2013), 16 - 19 September 2013, Çeşme Izmir, Turkey.

[8] Vanadium and Molybdenum Acetylacetonate Supported on Silyl Chloride Functionalized Nano-Boehmite for Epoxidation of Alkenes.

Advanced Materials World Congress (AMWC 2013), 16 - 19 September 2013, Çeşme Izmir, Turkey.

[7] Structural Comparison of Group IV Metal Alkoxide Complexes of 8-Hydroxyquinoline.

3rd Molecular Materials Meeting (M3) in Singapore, An International Conference on Frontiers in Material Science, Chemistry & Physic, 14 - 16 January 2013, Biopolis, Singapore.

[6] Catalytic Application of Molybdenum Hexa-Carbonyl Supported on Functionalized Nano-Boehmite.

Iran-Belarus International conference on Modern Application of Nanotechnology (IBCN12) 27 - 29 June 2012, Minsk, Belarus.

[5] Preparation of ZnAl₂O₄ Nano-Particle by Hydrothermal-Assisted Sol-gel Processing.

Iran-Belarus International conference on Modern Application of Nanotechnology (IBCN12) 27 - 29 June 2012, Minsk, Belarus.

[4] Effect of Solvent in Preparation of Potassium Niobate by Hydrothermal Assisted Sol-Gel Processing.

MC8, Advanced Materials by Chemical Design Conference, 2 - 5 July 2007, University College London, London, UK.

[3] Preparation and Characterization of Boehmite, CuO, TiO₂ and Nb₂O₅ by Hydrothermal Assisted Sol-gel Processing of Metal Alkoxide.

VI. Solid State Chemistry Conference, 13 - 17 September 2004, Prague, Czech Republic.

[2] Preparation of γ -Alumina from Aluminum Alkoxyaminates.

VI. Solid State Chemistry Conference, 13 - 17 September 2004, Prague, Czech Republic.

[1] Effect of Solution Chemistry on Preparation of Boehmite by Hydrothermal Assisted Sol-gel Processing of Al Alkoxides.

MD7, From Molecules to Materials Conference, 12 - 15 September 2004, Queen Mary, University of London, London, UK.

E: Iranian Conferences and Seminars

[86] Preparation and characterization of Mo supported amine functionalized poly-di-phenoxy-phosphazene for epoxidation of alkenes.
21st Iranian Inorganic Chemistry Conference, 28-29 August 2019,
Arak University, Iran.

[85] Plant-based synthesis of ceria nanoparticles and its catalytic activity.
20th Iranian Chemistry Congress, 17-19 July 2018,
Ferdowsi University of Mashhad, Iran.

[84] Food-directed synthesis of cerium oxide nanoparticles.
International Congress of Nutrition: From Laboratory Research to Clinical Studies,
6-8 September 2017, Mashhad, Iran.

[83] Synthesis, characterization and catalytic properties of MoO₂(acac)₂ immobilized on Fe₃O₄/PANI nanocomposites.
19th Iranian Inorganic Chemistry Conference, 5-7 September 2017,
Chemistry & Chemical Engineering Research center of Iran, Tehran.

[82] Synthesis and characterization of Fe₃O₄/PANI/AHS/Ag nanocomposites and its application in catalytic reductions of 2-nitroaniline and 4-nitroaniline.
19th Iranian Inorganic Chemistry Conference, 5-7 September 2017,
Chemistry & Chemical Engineering Research center of Iran, Tehran.

[81] Phthalocyanine complexes immobilized on polysilsesquioxane particles: a new and efficient catalyst for the oxidation of benzyl alcohol.
19th Iranian Inorganic Chemistry Conference, 5-7 September 2017,
Chemistry & Chemical Engineering Research center of Iran, Tehran.

[80] Preparation and characterization of Schiff base vanadium complex supported on nano-zirconia and its catalytic application in epoxidation of cyclooctene.
18th Iranian Inorganic Chemistry Conference, 7-9 March 2017,
Ferdowsi University of Mashhad, Iran.

[79] Synthesis and Characterization of zirconium chitosan molybdate nanocomposite and investigation of its catalytic application.
18th Iranian Inorganic Chemistry Conference, 7-9 March 2017,
Ferdowsi University of Mashhad, Iran.

[78] Effect of vanadium content on catalytic properties of H_{3+n}PMo_{12n}V_nO₄₀ (n=1-3) supported on polyaniline for epoxidation of cyclooctene.
18th Iranian Inorganic Chemistry Conference, 7-9 March 2017,
Ferdowsi University of Mashhad, Iran.

[77] Epoxidation of cyclooctene catalysed by $H_5PW_{10}V_2O_{40}$ supported on polyaniline as a heterogenous catalyst.

18th Iranian Inorganic Chemistry Conference, 7-9 March 2017,
Ferdowsi University of Mashhad, Iran.

[76] Boehmite nanoparticle supported-SO₃H as recyclable heterogeneous catalyst for the efficient One-Pot synthesis of Pyrazolo [1,2-a][1,2,4]triazole-1,3-diones.

24th Iranian Seminar of Organic Chemistry, 24-26 August 2016,
Azarbaijan Shahid Madani University, Tabriz, Iran.

[75] Caffeine supported on boehmite nanoparticles: An efficient ionic liquid catalyst for synthesis of pyrazolopyranopyrimidines.

24th Iranian Seminar of Organic Chemistry, 24-26 August 2016,
Azarbaijan Shahid Madani University, Tabriz, Iran.

[74] Epoxidation of Cyclooctene Catalyzed by 12-molybdophosphoric Acid and 12-Molybdosilicate Acid Supported on Functionalized polyaniline as Heterogeneous Catalysts.

24th Iranian Seminar of Organic Chemistry, 24-26 August 2016,
Azarbaijan Shahid Madani University, Tabriz, Iran.

[73] Synthesis of pyrazole-4-carbonitrile derivatives by using acidic nano-boehmite as heterogeneous and reusable catalyst in solvent free condition.

1st Iranian Applied Chemistry Seminar, 23-24 August 2016,
Tabriz University, Tabriz, Iran.

[72] $[PMo_{10}V_2O_{40}]$ and $[PW_{10}V_2O_{40}]$ Supported on Amine Functionalized Nano-boehmite for Catalytic Epoxidation of Alkenes.

18th Iranian Chemistry Congress (18ICC), 30 August- 1 September 2015,
Semnan University, Iran.

[71] Preparation and Characterization of Heteropoly-Acids Supported on Functionalized Nano-boehmite.

18th Iranian Chemistry Congress (18ICC), 30 August- 1 September 2015,
Semnan University, Iran.

[70] Investigation of Temperature, Solvent and Precursor on Preparation of $CaZrO_3$ Nano-particle by Hydrothermal-assisted Sol-gel Processing.

18th Iranian Chemistry Congress (18ICC), 30 August- 1 September 2015,

Semnan University, Iran.

[69] Investigation of Temperature, Solvent and Precursor on Preparation of BaZrO₃ Nano-particle by Hydrothermal-assisted Sol-gel Processing.

18th Iranian Chemistry Congress (18ICC), 30 August- 1 September 2015, Semnan University, Iran.

[68] Epoxidation of Alkenes Catalyzed by 12-molybdophosphoric Acid and 12-Molybdosilicate Acid Supported on Functionalized Nano-zirconia with Tri-methoxy silyl propyl amine as Heterogeneous Catalysts.

18th Iranian Chemistry Congress (18ICC), 30 August- 1 September 2015, Semnan University, Iran.

[67] Preparation and Characterization of Heteropoly-acids Supported on Functionalized Nano-zirconia with Tri-methoxy Silyl propyl amine.

18th Iranian Chemistry Congress (18ICC), 30 August- 1 September 2015, Semnan University, Iran.

[66] Synthesis and characterization of magnetic nano-particles as catalyst for the epoxidation of olefins.

16th Iranian Inorganic Chemistry Conference (IICC16), 27 - 29 August 2014, Bu-Ali Sina University, Hamedan, Iran.

[65] Vanadium oxo sulfate supported Fe₃O₄@boehmite functionalized with imidazole and investigation of its catalytic properties in epoxidation of olefins.

16th Iranian Inorganic Chemistry Conference (IICC16), 27 - 29 August 2014, Bu-Ali Sina University, Hamedan, Iran.

[64] Catalytic application of MoO₂(acac)₂ supported on Schiff base functionalized nano-zirconia in epoxidation of alkenes.

16th Iranian Inorganic Chemistry Conference (IICC16), 27 - 29 August 2014, Bu-Ali Sina University, Hamedan, Iran.

[63] Preparation and characterization of MoO₂(acac)₂ supported on Schiff base functionalized nano-zirconia.

16th Iranian Inorganic Chemistry Conference (IICC16), 27 - 29 August 2014, Bu-Ali Sina University, Hamedan, Iran.

[62] Preparation and characterization of VO(acac)₂ supported on diamine functionalized nano-zirconia.

16th Iranian Inorganic Chemistry Conference (IICC16), 27 - 29 August 2014,
Bu-Ali Sina University, Hamedan, Iran.

[61] Catalytic application of $\text{VO}(\text{acac})_2$ supported on ethylene diamine functionalized Nano-zirconia in epoxidation of alkenes.

16th Iranian Inorganic Chemistry Conference (IICC16), 27 - 29 August 2014,
Bu-Ali Sina University, Hamedan, Iran.

[60] Catalytic Epoxidation of Cycloocten with Molybdenum Hexa-Carbonyl Supported on Amine Functionalized Nano- Fe_3O_4 @Boehmite.

16th Iranian Chemistry Congress (16ICC), 7 - 9 September 2013,
Yazd University, Iran.

[59] Preparation of Nano- Fe_3O_4 @Boehmite Core-Shell via Hydrothermal Assisted Sol-Gel Processing.

16th Iranian Chemistry Congress (16ICC), 7 - 9 September 2013,
Yazd University, Iran.

[58] Crystal Structure of the First Geminal Diol Derivative of Quinoline: 8-Hydroxy-2-(dihydroxymethyl)quinolinium Chloride.

16th Iranian Chemistry Congress (16ICC), 7 - 9 September 2013,
Yazd University, Iran.

[57] Synthesis and Spectroscopic Study of V, Nb, Ti and Al Alkoxides with Aromatic Imines.

16th Iranian Chemistry Congress (16ICC), 7 - 9 September 2013,
Yazd University, Iran.

[56] Catalytic Application of $\text{MoO}_2(\text{acac})_2$ Supported on Nano-Zirconia in Epoxidation of Alkenes.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013,
Hakim Sabzevari University, Iran.

[55] Preparation and Characterization of $\text{MoO}_2(\text{acac})_2$ Supported on Nano-Zirconia.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013,
Hakim Sabzevari University, Iran.

[54] Heteropolyacids Supported on Amine Functionalized Nano-Boehmite for Catalytic Production of Biodiesel.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013,

Hakim Sabzevari University, Iran.

[53] Heteropolyacids Supported on Amine Functionalized Nano-Boehmite for Catalytic Epoxidation of Alkenes.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[52] Catalytic Epoxidation of Cycloocten with Vanadium Oxo Sulfate Supported on Amine Functionalized Nano-Fe₃O₄@Boehmite.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[51] Effect of Temperature and Time on the Preparation of Nano-Fe₃O₄@Boehmite Core-Shell via Sol-Gel Processing.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[50] Catalytic Epoxidation of Alkenes with Molybdenum Hexa-Carbonyl Supported on Amine Functionalized MIL-101 Metal-Organic Framework.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[49] Preparation and Characterization of Molybdenum Hexa-Carbonyl Supported on Amine Functionalized MIL-101 Metal-Organic Framework.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[48] Molybdenum di acetylacetonate anchored onto amine-functionalised Nano-boehmite and catalytic activity in the epoxidation of Alkenes.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[47] Effect of Solvent and Precursors on Preparation of Gahnite.

15th Iranian Inorganic Chemistry Conference (IICC15), 3 - 4 September 2013, Hakim Sabzevari University, Iran.

[46] Synthesis and Characterization of Niobium Oxo Complex with ^tBu-N(EtOH)₂.
2nd National Conference on Oil, Gas and Petrochemicals, 6 - 7 March 2013, Gachsaran, Iran.

[45] Catalytic Epoxidation of Alkenes with Schiff Base tri-dentate (N, O, S) Molybdenum Complex.

19th Iranian Seminar on Organic Chemistry, 5 - 7 September 2012, Vali-e-Asr University of Rafsanjan, Iran.

[44] Catalytic Epoxidation of Cyclooctenewith Vanadium-oxo-Sulphate Supported on Amin Functionalized Nano-Boehmite.

15th Iranian Physical Chemistry Conference, 3 - 6 September 2012, University of Tehran, Iran.

[43] Catalytic Application of Molybdenum Hexa-Carbonyl Supported on Functionalized Nano-Boehmite.

15th Iranian Physical Chemistry Conference, 3 - 6 September 2012, University of Tehran, Iran.

[42] Nano-hydroxyapatite supported $\text{MoO}_2(\text{acac})$: Structure characterization and catalysis for cycloocten epoxidation.

15th Iranian Physical Chemistry Conference, 3 - 6 September 2012, University of Tehran, Iran.

[41] Synthesis of immobilized molybdenum on carbon nanotubes supported and study of its activity in the oxidation of methylphenyl sulfide.

15th Iranian Physical Chemistry Conference, 3 - 6 September 2012, University of Tehran, Iran.

[40] Preparation functionalized carbon nanotubes supported dioxobis(acetylacetonate) Molybdenum complex and its catalytic application for the epoxidation of alkenes.

15th Iranian Physical Chemistry Conference, 3 - 6 September 2012, University of Tehran, Iran.

[39] Catalytic Epoxidation of Cycloocten with Vanadium-Oxo-Sulphate Supported on Imine Functionalized Nano-Boehmite.

14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[38] Catalytic Epoxidation of Cyclooctene with Molybdenum Hexa-Carbonyl Supported On Amine Functionalized Nano-Boehmite.

14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[37] Synthesis, Characterization and Single Crystal Structure of a Homo-metallic Tetra-nuclear Niobium(V) Ethoxide.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[36] Synthesis, Characterization and Catalytic Application of Schiff-base Tri-dentate (N, O, S) Vanadium Complex.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[35] Catalytic Epoxidation of Alkenes with a New Mo-Schiff-Base Complex Synthesis and Characterization of a Schiff base Tri-dentate (N,O,O) Molybdenum Complex.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[34] Catalytic Epoxidation of Alkenes with a New Mo Schiff base Complex.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[33] Effect of Temperature on Preparation of Single Phase Gahnite.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[32] Synthesis and Characterization of Niobium Pentaethoxide Complex with N-(2-hydroxyethyl)-2-oxy-1-naphthaldimine.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[31] Preparation and Characterization of $\text{VO}(\text{OiPr})_3$ and $\text{Al}(\text{OiPr})_3$ with Some Aromatic Iminic Ligands.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[30] Synthesis and Spectroscopic Study of Nb, Ti and Al Alkoxides with Aromatic Oximes.
14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[29] Preparation Functionalized Carbon nanotubes supported Dioxobis(acetylacetonate) Molybdenum Complexes and its catalytic application for the oxidation of methyl phenyl sulfide.

14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[28] Functionalized Carbon Nanotubes Supported Dioxobis(acetylacetonate) Molybdenum: An Efficient and Highly Reusable Catalyst for Epoxidation of Alkenes.

14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[27] Alkene Epoxidation Catalyzed by Molybdenum Complexes Supported on Nano-Hydroxy Apatite Surface.

14th Iranian Inorganic Chemistry Conference (IICC14), 28 - 29 August 2012, Sharif University of Technology, Iran.

[26] Synthesis of immobilized molybdenum complexes on polymer supported and study of its catalytic activity in the epoxidation of alkenes.

13th Iranian Inorganic Chemistry Conference (IICC13), 7 - 8 September 2011, University of Razi, Kermanshah, Iran.

[25] Synthesis and spectroscopic study of $Zr(O^iBu)_4$ and $VO(O^iPr)_3$ complex with aromatic oximes.

13th Iranian Inorganic Chemistry Conference (IICC13), 7 - 8 September 2011, University of Razi, Kermanshah, Iran.

[24] Synthesis and spectroscopic study of $[Nb(OEt)_3C_{12}H_{10}CNO]_2$.

13th Iranian Inorganic Chemistry Conference (IICC13), 7 - 8 September 2011, University of Razi, Kermanshah, Iran.

[23] Synthesis, characterization and catalytic properties of heterogeneous hexacarbonyl molybdenum Schiff base Complexes for the epoxidation of alkenes.

15th Iranian Chemistry Congress (ICC15), 4 - 6 September 2011, Bu-Ali Sina University, Hamedan, Iran.

[22] Synthesis and Spectroscopic Study of $[Nb(OEt)_3(C_{10}H_6)(O)CHNO]_2$.

15th Iranian Chemistry Congress (ICC15), 4 - 6 September 2011, Bu-Ali Sina University, Hamedan, Iran.

[21] Synthesis and Spectroscopic Study of $Ti(OEt)_4$ Complex with Benzophenon oxime.

15th Iranian Chemistry Congress (ICC15), 4 - 6 September 2011, Bu-Ali Sina University, Hamedan, Iran.

[20] Synthesis, Spectroscopic and X-ray Single Crystal Structure Study of μ -Oxo-bis{di-2-propoxo[pyridine 2-carbaldehyde oximato(1-)]-titanium(IV)}.

1st National Iranian New Chemistry Congress, 27 - 28 April 2011,
Islamic Azad University, Shiraz, Iran.

[19] Investigation of $H_3PW_{12}O_{40}$ and $H_4SiW_{12}O_{40}$ Adsorption on ZnO Powder.
14th Iranian Physical Chemistry Conference, 25 - 28 February 2011,
University of Tehran, Kish, Iran.

[18] Preparation and Characterization of ZrO_2 Supported with $H_3SiW_9Mo_2VO_{40}$ and Its Application in Catalytic Esterification Reactions.
14th Iranian Physical Chemistry Conference, 25 - 28 February 2011,
University of Tehran, Kish, Iran.

[17] Preparation and Characterization of Catalytic Beds Supported with Hetero-Poly Acids and Their Application in Catalytic Reactions.
12th Iranian Inorganic Chemistry Conference (IICC12), 15 - 16 September 2010,
University of Gilan, Rasht, Iran.

[16] Preparation and Characterization of Some Metal Alkoxide Complexes.
12th Iranian Inorganic Chemistry Conference (IICC12), 15 - 16 September 2010,
University of Gilan, Rasht, Iran.

[15] Synthesis, Spectroscopic and X-ray Single Crystal Structure Study of Isopropoxy-tris(phenylmethoxy) Titanium(IV).
11th Iranian Inorganic Chemistry Conference (IICC11), 13 - 14 May 2009, Isfahan University of Technology, Isfahan, Iran.

[14] Synthesis, Spectroscopic and X-ray Single Crystal Structure Study of μ -Oxobis {diethoxy[salicylaldoximate(2-)]-tantalum(V)}.
11th Iranian Inorganic Chemistry Conference (IICC11), 13 - 14 May 2009, Isfahan University of Technology, Isfahan, Iran.

[13] Preparation of Aluminum Titanate by Hydrothermal Assisted Sol-Gel Processing of Aluminum-Titanium Alkoxide Mixtures.
11th Iranian Inorganic Chemistry Conference (IICC11), 13 - 14 May 2009, Isfahan University of Technology, Isfahan, Iran.

[12] Synthesis and Characterization of Niobium and Tantalum Oxides: Solid Acid Catalysts.
International Catalysis Conference, 28 - 30 April 2008, Shahid Beheshti University, Tehran, Iran.

[11] Preparation and Characterization of Some Perovskite Powders (ABO_3) by Hydrothermal Assisted Sol-gel Processing.
The 3rd Iranian National Congress on Chemistry, 30 - 31 May 2007, Islamic Azad University, Varamin-Pishva Branch, Varamin, Iran.

[10] Preparation of Potassium Niobate by Hydrothermal Assisted Sol-gel Processing.
The 2nd Iranian National Congress on Chemistry, 19 - 20 December 2004, Islamic Azad University, Varamin-Pishva Branch, Varamin, Iran.

[9] Synthesis, Spectroscopic and X-ray Single Crystal Structure Study of 8-Hydroxy Quinoline Complexes of Titanium Alkoxide.

The 8th Iranian Seminar of Inorganic Chemistry, 24 - 26 August 2004, Tarbiat Moallem University of Azarbaijan, Tabriz, Iran.

[8] Synthesis and Characterization of CoAl_2O_4 Spinel by Hydrothermal Assisted Solgel Processing.

The 8th Iranian Seminar of Inorganic Chemistry, 24 - 26 August 2004, Tarbiat Moallem University of Azarbaijan, Tabriz, Iran.

[7] Synthesis and Characterization of Aluminum, Titanium and Niobium Alkoxide of 2-Pyridylethanol and Furfuryl Alcohol.

The 14th Congress of the Iranian Chemistry and Chemical Engineering Society, 17 - 19 February 2004, Teacher Training University, Tehran, Iran.

[6] Synthesis and Characterization of Magnesium Alkoxide With Ether Alcohols.

The 14th Congress of the Iranian Chemistry and Chemical Engineering Society, 17 - 19 February 2004, Teacher Training University, Tehran, Iran.

[5] A New Approach for Supporting Nickel Oxide on Silica Coated Alumina.

The 14th Congress of the Iranian Chemistry and Chemical Engineering Society, 17 - 19 February 2004, Teacher Training University, Tehran, Iran.

[4] Synthesis and Single Crystal Structural Characterization of $[\text{Nb}_2-\mu_2\text{-O}-\mu_2\text{-(orto-OC}_6\text{H}_4\text{CH=NO)}_2(\text{OCH}_2\text{CH}_3)_4]$.

The 11th Symposium of the Iranian Society of Crystallography and Mineralogy, 4 - 5 February 2004, Yazd University, Yazd, Iran.

[3] Hydrothermal Assisted Sol-gel Preparation of Nano-Spheres Boehmite from Aluminum Alkoxide.

The 7th Iranian Seminar of Inorganic Chemistry, 26 - 27 February 2003, Zanzan University, Zanzan, Iran.

[2] Preparation of Single Phase Mullite by Sol-gel Route.

The 7th Iranian Seminar of Inorganic Chemistry, 26 - 27 February 2003, Zanzan University, Zanzan, Iran.

[1] Synthesis and Characterization of A and X type Zeolite by Clay Conversion with Low Level of Iron Content from Iranian Caolinite.

The 2nd Chemical Congress of Islamic Azad University, 22 - 23 November 2000, Science and Research Branch, Tehran.

Updated on: 19 January 2024