



Alireza Farrokhi

Associate Professor

Faculty: Science

Department: Chemistry

Education

Degree	Graduated in	Major	University
Ph.D	2009	Inorganic Chemistry	Tarbiat Modares University

Employment Information

Faculty/Department	Position/Rank	Employment Type	Cooperation Type	Grade
University of birjand	Lecturer and Researcher	Tenure Track	Full Time	9

Work Experience

- Member of the Board of Trustees of the South Khorasan Business Clinic

Subjects Taught

- Inorganic Chemistry
- Crystallography

Course Topics

Inorganic Chemistry I & II

Organometallic Chemistry

Advanced Inorganic Chemistry

Thermodynamic and Kinetic of Inorganic Reactions

Inorganic Polymers

Structure and Bonding in Inorganic Chemistry

Crystallography

Physical Methods in Inorganic Chemistry

Chemical Application of Group Theory

Chemical Literatures

General Chemistry I & II

Membership in Scientific Societies

- Iranian Chemical Society

- American Chemical Society

Papers in Conferences

1. Rouhollah Khani, Samira Rashidi hematabadi, Alireza Farrokhi, Synthesis and performance evaluation of zeolitic imidazolate metal-organic framework hybrid nanocomposite based on carbon nanotubes for determination of diclofenac in food and biological samples, نهمین سمینار ملی دوسالانه کمومتریکس ایران, قزوین, 18 10 2023, pp. 0-0.
2. II علیرضا فرخی لاشیدانی, قدسیه باقرزاده, سیما آریانژاد, زهرا رضایی اول همدل اباد, چهار چوبهای آلی فلزی جدید مس به عنوان یک کاتالیزور گزینش پذیر برای اکسایش الکلهای بنزلی, نخستین سمینار شیمی کاربردی ایران, شماره صفحات - تبریز, ۲۰۱۶, ۲۲ ۰۸.
3. علیرضا فرخی لاشیدانی, قدسیه باقرزاده, سیما آریانژاد, سمانه یوسفی, سنتز, شناسایی و بررسی اثر کاتالیزوری کمپلکس مس, با لیگاند شیف باز ۵-((پیریدین ۲-ایل)) ۲ و ۶-دی متیل سیکلوهگزامن-۴-ان-۳ دی ان, نخستین سمینار شیمی کاربردی ایران, شماره صفحات - تبریز, ۲۰۱۶, ۲۲ ۰۸.
4. Rouhollah Khani, sareh parsapour, Alireza Farrokhi, Separation and Determination of Diethyl phthalate in Water Samples Based on STA-16(Fe) as an Efficient Sorbent, تجزیه و هفتمین سمینار شیمی تجزیه, pp. 0-0, 23 08 2022, زنجان.
5. Rouhollah Khani, sareh parsapour, Alireza Farrokhi, Trace quantification of dimethyl phthalate in fruit juice and water samples based on STA-12(Fe) as an efficient sorbent, بیست و یکمین کنگره بین المللی, تبریز, 26 07 2022, pp. 0-0, شیمی.
6. Rouhollah Khani, Alireza Farrokhi, Facile and Green Synthesis of Zeolite Imidazolate Framework for Preconcentration and Determination of Folic Acid in Various Food Samples, نهمین سمینار ملی شیمی و اراک, 03 09 2019, pp. 0-0, محیط زیست ایران.
7. Alireza Farrokhi, Cobalt Complex of Metal-Organic Framework as an Efficient Visible-Light Photocatalyst for Oxidation of Alcohols, بیست و هفتمین کنفرانس شیمی آلی ایران, ارومیه, 08 2019, pp. 0-0, 21.
8. Hossein Farsi, Alireza Farrokhi, Reza Sarhaddi, Li Zhihai, Experimental and Theoretical Investigations of Electronic Structure, Electrochemical Properties and Antibacterial Activity of \square -Ag₂MoO₄, بیستمین سمینار, زاهدان, 09 03 2019, pp. 0-0, شیمی معدنی انجمن شیمی ایران.
9. Rouhollah Khani, Alireza Farrokhi, Application of metal-organic frame work (MOF) as a very efficient sorbent for the separation and determination trace amount of anthracene in various real samples, تبریز, 03 09 2018, pp. - , بیست و پنجمین سمینار شیمی تجزیه ایران.
10. Maasoumeh Jafarpour, Alireza Farrokhi, Oxygen evolution reaction catalyzed by vanadium containing nanosphere polyoxomolybdate, تهران, 05 09 2017, pp. - , نوزدهمین کنفرانس شیمی معدنی ایران.
11. Maasoumeh Jafarpour, Alireza Farrokhi, Heterogeneous catalase-like activity of iron (III) based

- تهران, 05 09 2017, - pp. نوزدهمین کنفرانس شیمی معدنی ایران, nanoball polyoxomolybdate.
12. Hossein Farsi, Alireza Farrokhi, The Electrochemical Behavior of Safranin O on the Surface of Glassy Carbon in the Presence and Absence of Fe 2 and Fe 3 Ions as a Probe for Photogalvanic Effect, *سمنان*, 30 08 2015, pp. 637-637, هجدهمین کنگره شیمی ایران.
13. Hossein Farsi, Alireza Farrokhi, The Electrochemical Investigation of Safranin O as a synthetic Dye Photosensitizer for nano-TiO₂, *سمنان*, 30 08 2015, pp. 638-638, هجدهمین کنگره شیمی ایران.
14. Alireza Farrokhi, Synthesis Characterization and Crystal Structure of a New Supramolecular Metal Phosphonate, *رفسنجان*, 01 09 2014, pp. 5-5, هفدهمین کنگره شیمی ایران.
15. Alireza Farrokhi, Synthesis and Structural Characterization of Cu(2 2-bipy) (VO₂)(PO₄) a 1D Organic-Inorganic Hybrid Material, *رفسنجان*, 01 09 2014, pp. 72-72, هفدهمین کنگره شیمی ایران.

Papers in Journals

- Hossein Farsi, neda barekati, Alireza Farrokhi, Garren Horvath, Zhihai Li, Cobalt-organic framework as a Bi-functional electrocatalyst for renewable hydrogen production by electrochemical water splitting, *Applications in Energy and Combustion Science*, Vol. 3, No. 17, pp. 100240-100240, 2024, Scopus.
- Alireza Farrokhi, Jose Miguel Sansano, A new mixed-linker Fe-MOF as a multifunctional bio-photocatalyst for tandem photo-oxidation condensation reaction, *Journal of Photochemistry and Photobiology A: Chemistry*, Vol. 115263, No. 447, pp. 115263-115263, 2023, JCR, Scopus.
- Hossein Farsi, neda barekati, Alireza Farrokhi, Shokufeh Moghiminia, Ultrathin two-dimensional cobalt-organic framework nanosheets as an effective electrocatalyst for overall water splitting under alkaline conditions, *Electrochimica Acta*, Vol. 143075, No. 466, pp. 143075-143075, 2023, JCR, Scopus.
- Hossein Farsi, neda barekati, Alireza Farrokhi, Shokufeh Moghiminia, A comparison between 2D and 3D cobalt-organic framework as catalysts for electrochemical CO₂ reduction, *Heliyon*, Vol. 4, No. 10, pp. 26281-11, 2024, ISI, JCR, Scopus.
- Rouhollah Khani, Mobina Memarbashi aval, Alireza Farrokhi, Aluminium fumarate biological metal-organic framework as an emerging tool for isolation and detection trace amounts of sulfadiazine in food and water samples, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, No. 308, pp. 1-10, 2023, ISI, JCR, Scopus.
- Alireza Farrokhi, Cobalt isatin-Schiff-base derivative of MOF as a heterogeneous multifunctional bio-photocatalyst for sunlight-induced tandem air oxidation condensation process, *Scientific Reports*, Vol. 1, No. 13, pp. 5115-5135, 2023, JCR, Scopus.
- Hossein Farsi, Alireza Farrokhi, neda barekati, Li, Environmentally Benign Synthesis of Copper Benzenetricarboxylic Acid MOF as an Electrocatalyst for Overall Water Splitting and CO₂ Reduction, *ECS Advances*, Vol. 2, No. 1, pp. 20501-20501, 2022.
- علی زراعتکارمقدم, علیرضا فرخی لاشیدانی, فرزانه بیواره, سعیده دژبخش پور, کاربرد فوتوکاتالیستی چارچوب فلز-آلی بر پایه فسفونیک اسید برای حذف بیس فنول آ در نور طبیعی خورشید, *شیمی کاربردی*, مجلد ۶۰, شماره ۱۶, شماره صفحات ۹-۲۴, ۲۰۲۱, isc.
- Photocatalytic application of a phosphonate-based metal-organic framework for the removal of bisphenol A under natural sunlight, *شیمی کاربردی*, مجلد ۶۰, شماره ۱۶, شماره صفحات ۹-۲۴, ۲۰۲۰, isc.
- علیرضا فرخی لاشیدانی, معصومه جعفرپور, بیس فسفونیک اسید بعنوان یک کاتالیزور آلی ناهمگن برای سنتز مشتقات ایندولی, *پژوهشهای شیمی*, مجلد ۱, شماره ۱, شماره صفحات ۴۰-۴۶, ۲۰۱۸, isc.
- Alireza Farrokhi, José Miguel Sansano, Fe-MIL-101 modified by isatin-Schiff-base-Co: a heterogeneous catalyst for C-C, C-O, C-N, and C-P cross coupling reactions, *New Journal of Chemistry*, Vol. 42, No. 45, pp. 19963-19976, 2021, JCR, Scopus.
- Reza Sarhaddi, Hossein Farsi, Alireza Farrokhi, Zhihai Li, Elucidating the electronic structures of □-Ag₂MoO₄ and Ag₂O nanocrystals via theoretical and experimental approaches towards electrochemical water splitting and CO₂ reduction, *Physical Chemistry Chemical Physics*, Vol. 15, No. 23, pp. 9539-9552, 2021, JCR, Scopus.

13. Hossein Farsi,Alireza Farrokhi,Effects of water content on electrochemical capacitive behavior of nanostructured Cu₃(BTC)₂ MOF prepared in aqueous solution,Electrochimica Acta,Vol. 137616,No. 368,pp. 1-12,2021,JCR.Scopus.
14. Alireza Farrokhi,saeideh dejbakhshpour,Insight into the photocatalytic properties of phosphonatebased metal–organic frameworks for reduction of Cr (VI) and Synergistic elimination of organic dyes under natural sunlight,Applied Organometallic Chemistry,Vol. 11,No. 34,pp. 1-11,2020,JCR.Scopus.
15. Rouhollah Khani,Alireza Farrokhi,Performance of metal-organic framework as an excellent sorbent for highly efficient and sensitive trace determination of anthracene in water and food samples,Environmental Science and Pollution Research,Vol. 22,No. 27,pp. 26305-26314,2020,JCR.Scopus.
16. Maasoumeh Jafarpour,Alireza Farrokhi,{Mo₇₂Fe₃₀} Nanoclusters for the Visible-Light-Driven Photocatalytic Degradation of Organic Dyes,ACS Applied Nano Materials,Vol. 1,No. 3,pp. 648-657,2020,Scopus.
17. Alireza Farrokhi,Maasoumeh Jafarpour,Highly selective and efficient oxidation of benzylic alcohols with sulfate radical over metal-organic frameworks,Journal of Organometallic Chemistry,Vol. 1,No. 903,pp. 120995-120996,2019,JCR.Scopus.
18. Alireza Farrokhi,Alipour Mahbobeh,Maasoumeh Jafarpour,Solar-driven advanced oxidation process catalyzed by metal-organic frameworks for water depollution,Polyhedron,Vol. 170,No. 170,pp. 325-333,2019,JCR.Scopus.
19. Alireza Farrokhi,Feizpour Fahimeh,Degradation of hazardous organic dyes with solar?driven advanced oxidation process catalyzed by the mixed metal-organic frameworks,Applied Organometallic Chemistry,Vol. 33,No. 33,pp. 4928-4930,2019,JCR.Scopus.
20. Alireza Farrokhi,Maasoumeh Jafarpour,A Cooperative Effect in a Novel Bimetallic Mo-V Nanocomplex Catalyzed Selective Aerobic C-H Oxidation,Acs Omega,Vol. 4,No. 4,pp. 3601-3610,2019,JCR.Scopus.
21. Alireza Farrokhi,Maasoumeh Jafarpour,Visible-light driven catalase-like activity of blackberry-shaped Mo₇₂Fe₃₀ nanovesicles combined kinetic and mechanistic studies,Catalysis Science & Technology,Vol. 8,pp. 4645-4656,2018,JCR.Scopus.
22. Alireza Farrokhi,Maasoumeh Jafarpour,Magnetic Bisphosphonic Acid Nanohybrid Catalyzed Heterogeneous Synthesis of Heterocycles,ChemistrySelect,Vol. 3,No. 4,pp. 1234-1241,2018,JCR.
23. Alireza Farrokhi,Potentiometric and Thermodynamic Studies of Some Metal-Cysteine Complexes,Journal of the Chinese Chemical Society,Vol. 65,No. 2,pp. 217-224,2018,JCR.Scopus.
24. Alireza Farrokhi,Binary Complexes of Aspartic Acid with Some Metal Ions in Aqueous Solution and Water-dioxane Mixtures,Chemical Science International Journal,Vol. 19,No. 4,pp. 1-15,2017.
25. Alireza Farrokhi,Efficient and recyclable novel Ni-based metal-organic framework nanostructure as catalyst for the cascade reaction of alcohol oxidation-Knoevenagel condensation,Applied Organometallic Chemistry,Vol. 31,pp. 0-,2017,JCR.Scopus.
26. Alireza Farrokhi,A nanoscale Cu-metal organic framework with Schiff base ligand Synthesis characterization and investigation catalytic activity in the oxidation of alcohols,Inorganic Chemistry Communications,Vol. 81,pp. 37-42,2017,JCR.Scopus.
27. Alireza Farrokhi,Maasoumeh Jafarpour,Phosphonate-based Metal Organic Frameworks as Robust Heterogeneous Catalysts for TBHP Oxidation of Benzylic Alcohols,Catalysis Letters,Vol. 147,No. 7,pp. 1714-1721,2017,JCR.Scopus.
28. Alireza Farrokhi,Gholivand Khodayar,Yaghoubi Rouhollah,Khoddami Shahram,Two new supramolecular metal diphosphonates Synthesis characterization crystal structure and inhibiting effects on metallic corrosion,Journal of Solid State Chemistry,Vol. 243,pp. 23-30,2016,JCR.Scopus.
29. Maasoumeh Jafarpour,Alireza Farrokhi,Enhanced aqueous oxidation activity and durability of simple manganese(iii) salen complex axially anchored to maghemite nanoparticles,RSC Advances,Vol. 6,pp. 64640-64650,2016,ISI.JCR.Scopus.

30. Maasoumeh Jafarpour,Alireza Farrokhi,A Selective and Sustainable Sulfoxidation Method Catalyzed by Reusable Manganese (III) Schiff Base Complexes,Current Catalysis,Vol. 4,pp. 4-11,2015.