

**Rahmatollah Rahimi**

Professor, Inorganic Chemistry Division

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Academic Degrees:

- Bachelor of Science: Chemistry, Howard University, USA, 1983
- Master of Science: Physical chemistry, Howard University, USA, 1987
- Ph. D.: Inorganic Chemistry, Howard University, USA, 1991

Active Research fields:

- Synthesis and characterization of porphyrins and metalloporphyrins and investigation of their applications.
- Photocatalysis process
- Preparation and characterization of solar cells
- Environmental projects
- Bioinorganic chemistry

Teaching Experiences:

A) Teaching Courses at undergraduate level:

- General chemistry
- Inorganic Chemistry
- Physical chemistry

-Physical chemistry laboratory

-General Chemistry laboratory

-Chemistry science literature

B) Teaching Courses at graduate level(MS):

-The professional language for Chemistry

-Inorganic kinetics and Thermodynamics

-Physical Inorganic Chemistry

-Research method

-Advanced Inorganic Chemistry

-Bio Inorganic Chemistry

C) Teaching Courses at graduate level(PhD):

-Advanced Bio Inorganic Chemistry

-Structures and bonds of inorganic components

- Organometallic Chemistry

Patents:

1. "Application of LED lamps for treatment and disinfection of wastewaters using nanophotocatalysts" Rahmatollah Rahimi, Javad Shokraian, Mahboobeh Rabbani, 2013.

2. "Synthesis of ZnO Nanorods in low temperature via Coprecipitation Method" Rahmatollah Rahimi, Marzieh Yaghoubi Berijani, Solmaz Zargari, 2013.

3. "Synthesis of BiVO₄ photocatalyst with two monoclinic and tetragonal phases, active in visible and ultraviolet region", Rahmatollah Rahimi, Marzieh Yaghoubi Berijani, Solmaz Zargari, 2013.

4. "Synthesis of polypyrrole-iron oxide functionalized with porphyrin as an efficient sorbent of industrial pollutions", Rahmatollah Rahimi, Meisam Asadi Davati, Solmaz Zargari, 2013.

5. "Synthesis of Titanium dioxide (TiO_2)-Vanadium phosphorous nanocomposite oxidized with silver (Ag-VPO) as a catalyst (Ag-VPO/ TiO_2) and is organic pollution degradation under visible light illumination", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012.
6. "Synthesis of SbVO_4 - TiO_2 nanocomposite as a catalysts and its investigation in degradation of organic pollutions under visible light irradiation", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012.
7. "Synthesis of Titanium dioxide-Bismut vanadat (BiVO_4 - TiO_2) sensitized with porphyrin (TCPP) and its photocatalytic application under visible light irradiation", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012.
8. "Preparation of V- TiO_2 -TCPP and its concurrent application in removal and degradation of industrial pollutants", Rahmatollah Rahimi, Masoumeh Mahjoub Moghaddas, Solmaz Zargari, 2012.
9. "Preparation of V doped TiO_2 mesoporous and sensitized with porphyrin over SBA-15 substrate", Ahmad Najafian, Masoumeh Mahjoub Moghaddas, Rahmatollah Rahimi, 2012.
10. "Preparation of porphyrin on SBA-15 catalysts", Mehdi Deilam Kamar, Ahmad najafian, Rahmatollah Rahimi, 2012.
11. "Nanoporous TiO_2 solar cell sensitized with tetra(4-carboxyphenyl)porphyrin", Rahmatollah Rahimi, Pegah Tvakoli fard, 2010

2023

1. Eslaminejad, S., Rahimi, R., & Fayazi, M. (2023). Sepiolite-metal organic framework-iron oxide catalyst for degradation of Rhodamine B using Fenton-like process. *Journal of the Taiwan Institute of Chemical Engineers*, 152, 105181.
2. Shahriyari Far, H., Najafi, M., Hasanzadeh, M., & Rahimi, R. (2023). Designing a novel porous $\text{Ti}_3\text{C}_2\text{T}_x$ MXene/MOF-based 3D-printed architecture as an efficient and easy recoverable adsorbent for organic dye removal from aqueous solution. *International Journal of Environmental Analytical Chemistry*, 1-16.
3. Akbarzadeh, A. R., Rahimi, R., & Tayebi, L. (2023). Catalytic conversion of carbon dioxide by metal-organic frameworks: an effective approach for CO_2 utilization. *Pollution*.
4. Nosrati, P., Rahimi, R., & Hosseini-Kharat, M. (2023). Investigation of antibacterial photodynamic inactivation in urea-doped TiO_2 sensitized with porphyrin photocatalysis. *Journal of Porphyrins and Phthalocyanines*, A-N.

5. Sedghi, M., Hosseini-Kharat, M., Rahimi, R., & Rabbani, M. (2023). New composites based on aluminum alloy 5083 (TiO₂ (x)/AA): investigation of plasmonic effect, semiconductor thickness, and calcination temperature on photodegradation process. *Inorganic and Nano-Metal Chemistry*, 53(6), 560-569.
6. Far, H. S., Najafi, M., Hasanzadeh, M., & Rahimi, R. (2023). Synthesis of MXene/Metal-Organic Framework (MXOF) composite as an efficient photocatalyst for dye contaminant degradation. *Inorganic Chemistry Communications*, 152, 110680.
7. Nejad, S. T., Rahimi, R., Rabbani, M., & Rostamnia, S. (2023). Facile photosynthesis of novel porphyrin-derived nanocomposites containing Ag, Ag/Au, and Ag/Cu for photobactericidal study. *Scientific reports*, 13(1), 8580.
8. Gharehdaghi, Z., Naghib, S. M., Rahimi, R., Bakhshi, A., Kefayat, A., & Molaabasi, F. (2023). Highly improved pH-Responsive anticancer drug delivery and T2-Weighted MRI imaging by magnetic MOF CuBTC-based nano/microcomposite. *Frontiers in Molecular Biosciences*, 10, 1071376.
9. Tayebi, L., Rahimi, R., Akbarzadeh, A. R., & Maleki, A. (2023). A reliable QSPR model for predicting drug release rate from metal–organic frameworks: a simple and robust drug delivery approach. *RSC Advances*, 13(35), 24617-24627.
10. Najafi, M., & Rahimi, R. (2023). Synthesis of novel Zr-MOF/cloisite-30B nanocomposite for anionic and cationic dye adsorption: optimization by design-expert, kinetic, thermodynamic, and adsorption study. *Journal of Inorganic and Organometallic Polymers and Materials*, 33(1), 138-150.

2022

1. Heravifard, Z., Akbarzadeh, A. R., Tayebi, L., & Rahimi, R. (2022). Structural Properties Covalent Organic Frameworks (COFs): From Dynamic Covalent Bonds to their Applications. *CHEMISTRYSELECT*, 7(48), e202202005.
2. Moradi, E., Rahimi, R., & Azari, S. (2022). Facile preparation of nanostructures copper-based metal-organic framework with highly selective and sensitive luminescent sensing of THF small molecules and a study of the antibacterial activity.
3. Tayebi, L., Rahimi, R., & Akbarzadeh, A. R. (2022). Enhanced Photocatalytic CO₂ Reduction by Novel Designed Porphyrin-Based MOFs: From Accurate QSPR Model to Experimental Exploration. *ACS Omega*, 7(45), 40869-40881.
4. Tehrani Nejad, S., Rahimi, R., Rabbani, M., & Rostamnia, S. (2022). Zn (II)-porphyrin-based photochemically green synthesis of novel ZnTPP/Cu nanocomposites with antibacterial activities and cytotoxic features against breast cancer cells. *Scientific reports*, 12(1), 17121.

5. Khanlarkhani, S., Akbarzadeh, A. R., & Rahimi, R. (2022). A retrospective-prospective survey of porphyrinoid fluorophores: towards new architectures as an electron transfer systems promoter. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 102(7-8), 577-601.
6. Far, H. S., Hasanzadeh, M., Najafi, M., & Rahimi, R. (2022). In-situ self-assembly of mono- and bi-metal organic frameworks onto clay mineral for highly efficient adsorption of pollutants from wastewater. *Chemical Physics Letters*, 799, 139626.
7. Gharehdaghi, Z., Rahimi, R., Naghib, S. M., & Molaabasi, F. (2022). Fabrication and application of copper metal-organic frameworks as nanocarriers for pH-responsive anticancer drug delivery. *Journal of the Iranian Chemical Society*, 19(7), 2727-2737.
8. Lotfi, H., Anbia, M., Rahimi, R., & Yazdi, F. (2022). The Role of Adsorption-Fenton Oxidation in Degradation of Phenolic Contaminants by Fabrication of Bionanocomposite from Industrial Residue. *CHEMISTRYSELECT*, 7(22), e202104364.
9. Khosravi, H., Rahimi, R., Rabbani, M., & Maleki, A. (2022). Synthesis and Characterization of Amine-Functionalized Manganese Porphyrin Immobilized on Silica-Zirconium Ferrite and Evaluation of Its Catalytic Function in Cyclohexane Oxidation. *Nashrieh Shimi va Mohandesi Shimi Iran*, 40(4), 129-138.
10. Najafi, M., Akbarzadeh, A. R., Rahimi, R., & Keshavarz, M. H. (2022). QSPR model for estimation of photodegradation average rate of the porphyrin-TiO₂ complexes and prediction of their biodegradation activity and toxicity: Engineering of two annihilators for water/waste contaminants. *Journal of Molecular Structure*, 1249, 131463.
11. Far, H. S., Hasanzadeh, M., Najafi, M., & Rahimi, R. (2022). Hybridization of Nanoclay with a Chromium-Based Metal-Organic Framework for Boosting Adsorption of Organic Dyes from Wastewater. *CHEMISTRYSELECT*, 7(5), e202104191.
12. Far, H. S., Najafi, M., Hasanzadeh, M., & Rahimi, R. (2022). A 3D-printed hierarchical porous architecture of MOF@ clay composite for rapid and highly efficient dye scavenging. *New Journal of Chemistry*, 46(48), 23351-23360.

2021

1. Rabbani, M., Shokraiyani, J., Rahimi, R., & Amrollahi, R. (2021). Comparison of photocatalytic activity of ZnO, Ag-ZnO, Cu-ZnO, Ag, Cu-ZnO and TPPS/ZnO for the degradation of methylene blue under UV and visible light irradiation. *Water Science and Technology*, 84(7), 1813-1825.

2. Gharehdaghi, Z., Rahimi, R., Naghib, S. M., & Molaabasi, F. (2021). Cu (II)-porphyrin metal-organic framework/graphene oxide: Synthesis, characterization, and application as a pH-responsive drug carrier for breast cancer treatment. *JBIC Journal of Biological Inorganic Chemistry*, 26, 689-704.
3. Hamidian, K., Rahimi, R., Hosseini-Kharat, M., & Alavi, M. (2021). Development of the molecular engineering of disazo dye sensitizers and TiO₂ semiconductor surface to improve the power conversion efficiency of dye-sensitized solar cells. *Journal of Photochemistry and Photobiology A: Chemistry*, 418, 113408.
4. Hosseini-Kharat, M., Rahimi, R., Alizadeh, A. M., Zargarian, D., Khalighfard, S., Mangin, L. P., . . . Momtazi-Borojeni, A. A. (2021). Cytotoxicity, anti-tumor effects and structure-activity relationships of nickel and palladium S, C, S pincer complexes against double and triple-positive and triple-negative breast cancer (TNBC) cells. *Bioorganic & medicinal chemistry letters*, 43, 128107.
5. Hamidian, K., Rahimi, R., & Hosseini-Kharat, M. (2021). Bisazo dye compounds based on aliphatic and aromatic diamine linking groups: Thermal behavior, chemical stability, electrochemical study, interaction with AgNPs and in vitro anti-pathogen activity. *Inorganic Chemistry Communications*, 128, 108559.
6. Asgari, M. S., Mohammadi-Khanaposhtani, M., Sharafi, Z., Faramarzi, M. A., Rastegar, H., Nasli Esfahani, E., . . . Biglar, M. (2021). Design and synthesis of 4, 5-diphenyl-imidazol-1, 2, 3-triazole hybrids as new anti-diabetic agents: in vitro α -glucosidase inhibition, kinetic and docking studies. *Molecular Diversity*, 25, 877-888.
7. Moradi, E., Farajnejad Ghadi, H., Rabbani, M., & Rahimi, R. (2021). Microwave-assisted synthesized and characterization of BiFeO₃ (CTAB/PEG/PVA) nanocomposites by the auto-combustion method with efficient visible-light photocatalytic dye degradation. *Journal of Materials Science: Materials in Electronics*, 32, 8237-8248.
8. Sedghi, M., Rahimi, R., & Rabbani, M. (2021). Synthesis of aluminum alloy (AA) based composites TiO₂/Al5083 and porphyrin/TiO₂/Al5083: Novel photocatalysts for water remediation in visible region. *Inorganic Chemistry Communications*, 126, 108486.
9. Fayyaz, F., Rassa, M., & Rahimi, R. (2021). Antibacterial photoactivity and thermal stability of tetra-cationic porphyrins immobilized on cellulosic fabrics. *Photochemistry and photobiology*, 97(2), 385-397.
10. Asgari, M. S., Bahadorikhalili, S., Ghaempanah, A., Ranjbar, P. R., Rahimi, R., Abbasi, A., . . . Mahdavi, M. (2021). Copper-catalyzed one-pot synthesis of amide linked 1, 2, 3-triazoles bearing aryloxy skeletons. *Tetrahedron letters*, 65, 152765.

11. Sadegh Asgari, M., Bahadorikhalili, S., Rahimi, R., & Mahdavi, M. (2021). Copper Supported onto Magnetic Nanoparticles as an Efficient Catalyst for the Synthesis of Triazolobenzodiazepino [7, 1-b] quinazolin-11 (9H)-ones via Click N-Arylation Reactions. *CHEMISTRYSELECT*, 6(6), 1385-1392.
12. Kara, G. K., Moshari, M., Rabbani, M., & Rahimi, R. (2021). A novel and green heterogeneous photocatalytic system ($\text{Ca}_{0.01}\text{Fe}_{2.99}\text{O}_4/\text{CaTiO}_3$ nanocomposite): Protocol synthesis, characterization, and study of photo-decoloration activity. *Materials Chemistry and Physics*, 259, 124062.
13. Khosravi, H. B., Rahimi, R., Rabbani, M., Maleki, A., & Mollahosseini, A. (2021). Design, facile synthesis and characterization of Porphyrin-zirconium-ferrite@ SiO_2 Core-Shell and catalytic application in cyclohexane oxidation. *Silicon*, 13, 451-465.
14. Parvaz, S., Rabbani, M., & Rahimi, R. (2021). Fabrication of novel magnetic ZnO hollow spheres/pumice nanocomposites for photodegradation of Rhodamine B under visible light irradiation. *Materials Science and Engineering: B*, 263, 114863.

2020

1. Asgari, M. S., Tahmasebi, B., Mojtavavi, S., Faramarzi, M. A., Rahimi, R., Ranjbar, P. R., . . . Mohammadi-Khanaposhtani, M. (2020). Design, synthesis, biological evaluation, and docking study of new acridine-9-carboxamide linked to 1, 2, 3-triazole derivatives as antidiabetic agents targeting α -glucosidase. *Journal of Heterocyclic Chemistry*, 57(12), 4348-4357.
2. Bayat, R., Derakhshi, P., Rahimi, R., Safekordi, A. A., & Rabbani, M. (2020). Removal of Methylene Blue Pollutant from Wastewater Using ZnFe_2O_4 -ZnO-Perlite Nanocomposite in Batch Reactor. *Journal of Water and Wastewater; Ab va Fazilab (in persian)*, 31(4), 114-126.
3. Asgari, M. S., Azizian, H., Nazari Montazer, M., Mohammadi-Khanaposhtani, M., Asadi, M., Sepehri, S., . . . Larijani, B. (2020). New 1, 2, 3-triazole-(thio) barbituric acid hybrids as urease inhibitors: design, synthesis, in vitro urease inhibition, docking study, and molecular dynamic simulation. *Archiv der Pharmazie*, 353(9), 2000023.
4. Pordel, S., Rabbani, M., Rahimi, R., Heidari-Golafzani, M., & Azad, A. (2020). Synthesis of mesoporous $\text{NiO}/\text{Bi}_2\text{WO}_6$ nanocomposite for selective oxidation of alcohols. *Solid State Sciences*, 1.6306.
5. Asgari, M. S., Azizian, H., Nazari Montazer, M., Mohammadi-Khanaposhtani, M., Asadi, M., Sepehri, S., . . . Larijani, B. (2020). New 1,2,3-triazole-(thio) barbituric acid hybrids as urease inhibitors: Design, synthesis, in vitro urease inhibition, docking study, and molecular dynamic simulation. *Archiv der Pharmazie*, e2000023.

6. Alavi, M., Rahimi, R., Maleki, Z., & Hosseini-Kharat, M. (2020). Improvement of Power Conversion Efficiency of Quantum Dot-Sensitized Solar Cells by Doping of Manganese into a ZnS Passivation Layer and Cosensitization of Zinc-Porphyrin on a Modified Graphene Oxide/Nitrogen-Doped TiO₂ Photoanode. ACS Omega.
7. Asgari, M. S., Sepehri, S., Bahadorikhalili, S., Ranjbar, P. R., Rahimi, R., Gholami, A., . . . Mahdavi, M. (2020). Magnetic silica nanoparticle-supported copper complex as an efficient catalyst for the synthesis of novel triazolopyrazinylacetamides with improved antibacterial activity. Chemistry of Heterocyclic Compounds, 1-7
8. Moradi, E., Rahimi, R., & Safarifard, V. (2020). Ultrasound-assisted preparation nanostructures of Cu₂ (BDC)₂ (BPY)-MOF: Highly selective and sensitive luminescent sensing of THF small molecule and Cu²⁺ and Pb²⁺ ions. Journal of Solid State Chemistry, 121397.
9. Rahimi, R., Rabbani, M., Balooch Khosravi, H., & Maleki, A. (2020). Synthesize and Characterization of mesoporous ZrFe₂O₄@SiO₂ Core-shell Nanocomposite Modified with APTES and TCPP. Journal of Nanostructures, 10(2), 404-414.
10. Aghakhaninejad, S., Zargari, S., & Rahimi, R. (2020). Synthesis of pineapple slab like morphology of ternary BiVO₄/graphene/porphyrin nanocomposite with enhanced visible light photocatalytic activity. SN Applied Sciences, 2(4), 1-12.
11. Khosravi, H. B., Rahimi, R., Rabbani, M., Maleki, A., & Mollahosseini, A. (2020). Design, Facile Synthesis and Characterization of Porphyrin-Zirconium-Ferrite SiO₂ Core-Shell and Catalytic Application in Cyclohexane Oxidation. Silicon, 1-15.
12. Asgari, M. S., Mohammadi-Khanaposhtani, M., Sharafi, Z., Faramarzi, M. A., Rastegar, H., Esfahani, E. N., . . . Biglar, M. (2020). Design and synthesis of 4, 5-diphenyl-imidazol-1, 2, 3-triazole hybrids as new anti-diabetic agents: in vitro α -glucosidase inhibition, kinetic and docking studies. Molecular Diversity, 1-12.
13. Khosravi, H. B., Rahimi, R., Rabbani, M., & Maleki, A. (2020). Design and development of new preparation methods and catalytic activities of a magnetic ZrFe₂O₄ nanostructure. Journal of the Iranian Chemical Society, 1-12.
14. Moradi, E., Rahimi, R., Farahani, Y. D., & Safarifard, V. (2020). Porphyrinic zirconium-based MOF with exposed pyrrole Lewis base site as a luminescent sensor for highly selective sensing of Cd²⁺ and Br⁻ ions and THF small molecule. Journal of Solid State Chemistry, 282, 121103.
15. Moradi, E., Rahimi, R., & Safarifard, V. (2020). Porphyrinic zirconium-based MOF with exposed pyrrole Lewis base site as an efficient fluorescence sensing for Hg²⁺ ions, DMF small

molecule, and adsorption of Hg^{2+} ions from water solution. *Journal of Solid State Chemistry*, 121277.

16. Asgari, M. S., Rashidi Ranjbar, P., Rahimi, R., & Mahdavi, M. (2020). Synthesis of Arylidene-Isoquinolinones bearing Combretastatin Skeleton by Cyclocarbopalladation/cross coupling Tandem Heck-Suzuki-Miyaura Reactions using nano catalyst Pd@Py-IL-SPION. *Applied Organometallic Chemistry*, 34(2), e5279.

17. Hasankola, Z. S., Rahimi, R., Shayegan, H., Moradi, E., & Safarifard, V. (2020). Removal of Hg^{2+} heavy metal ion using a highly stable mesoporous porphyrinic zirconium metal-organic framework. *Inorganica Chimica Acta*, 501, 119264.

18. Asgari, M. S., Bahadorikhalili, S., Asadi, M., Rashidi Ranjbar, P., Larijani, B., Rahimi, R., & Mahdavi, M. (2020). Amine-carbon disulfide promoted synthesis of novel benzo [e][1,3]thiazepin-5 (1H)-one derivatives. *Journal of Heterocyclic Chemistry*, 57(1), 413-418.

2019

1. Asgari, M. S., Mohammadi-Khanaposhtani, M., Kiani, M., Ranjbar, P. R., Zabihi, E., Pourbagher, R., . . . Larijani, B. (2019). Biscoumarin-1, 2, 3-triazole hybrids as novel anti-diabetic agents: Design, synthesis, in vitro α -glucosidase inhibition, kinetic, and docking studies. *Bioorganic chemistry*, 92, 103206.

2. Hosseini-Kharat, M., Rahimi, R., Zargarian, D., Mehri Lighvan, Z., Momtazi-Borojeni, A. A., Sharifi, T., . . . Mohammadi, T. (2019). Antiproliferative activity of morpholine-based compounds on MCF-7 breast cancer, colon carcinoma C₂₆, and normal fibroblast NIH-3T3 cell lines and study of their binding affinity to calf thymus-DNA and bovine serum albumin. *Journal of Biomolecular Structure and Dynamics*, 37(14), 3788-3802.

3. Besheli, M. E., Rahimi, R., Farahani, Y. D., & Safarifard, V. (2019). A porous Ni-based metal-organic framework as a selective luminescent probe to Fe^{3+} metal ion and MeOH. *Inorganica Chimica Acta*, 495, 118956.

4. Hasankola, Z. S., Rahimi, R., & Safarifard, V. (2019). Rapid and efficient ultrasonic-assisted removal of lead (II) in water using two copper-and zinc-based metal-organic frameworks. *Inorganic Chemistry Communications*, 107, 107474.

5. Kharazi, P., Rahimi, R., & Rabbani, M. (2019). Copper ferrite-polyaniline nanocomposite: Structural, thermal, magnetic and dye adsorption properties. *Solid State Sciences*, 93, 95-100.

6. Fayyaz, F., Rahimi, R., & Maleki, A. (2019). A Comparative Kinetic Study of the Photo-oxidation of Phenol by Tetra-cationic Porphyrins and Zinc Compounds. *Biomacromolecular Journal*, 5(1), 72-82.
7. Asgari, M., Mirzazadeh, R., Larijani, B., Ranjbar, P. R., Rahimi, R., & Mahdavi, M. (2019). Palladium-Catalyzed Regioselective Heck–Suzuki–Miyaura Cascade Cyclization for the Synthesis of Trisubstituted Arylideneisoquinolinones. *Synlett*, 30(9), 1073-1076.
8. Rabbani, M., Rahimi, R., Ghadi, M. R., & Heidari-Golafzani, M. (2019). A facile and green method of preparation of mesoporous ZnFe₂O₄ with enhanced adsorption activity. *DESALINATION AND WATER TREATMENT*, 154, 195-200.
9. Sedghi, M., Rahimi, R., & Rabbani, M. (2019). Design of a Plasmonic Photocatalyst Structure Consisting of Metallic Nanogratings for Light-Trapping Enhancement. *Plasmonics*, 14(2), 347-352.
10. Bayat, R., Derakhshi, P., Rahimi, R., Safekordi, A. A., & Rabbani, M. (2019). A magnetic ZnFe₂O₄/ZnO/perlite nanocomposite for photocatalytic degradation of organic pollutants under LED visible light irradiation. *Solid State Sciences*, 89, 167-171.
11. Asgari, M. S., Soheilzad, M., Ranjbar, P. R., Larijani, B., Rahimi, R., & Mahdavi, M. (2019). Novel and efficient synthesis of triazolobenzodiazepine analogues through the sequential Ugi 4CR-click-N-arylation reactions. *Tetrahedron letters*, 60(8), 583-585.
12. Moradi, E., Rahimi, R., & Safarifard, V. (2019). Sonochemically synthesized microporous metal–organic framework representing unique selectivity for detection of Fe³⁺ ions. *Polyhedron*, 159, 251-258.
13. Tayebi, L., Rahimi, R., & Rabbani, M. (2019). Synthesis of a Novel Porphyrin-Based Metal–Organic Framework (Co-Por MOF). Paper presented at the Multidisciplinary Digital Publishing Institute Proceedings.
14. Moradi, E., Rahimi, R., Safarifard, V., & Azari, S. (2019). A Sonochemically-Synthesized Microporous Metal-Organic Framework for the Rapid and Efficient Ultrasonic-Assisted Removal of Mercury (II) Ions in a Water Solution and a Study of the Antibacterial Activity. Paper presented at the Multidisciplinary Digital Publishing Institute Proceedings.
15. Fayyaz Jorshari, F., Rabbani, M., Rahimi, R., & Rassa, M. (2019). Preparation, characterization and Photo-inactivation of cellulose nanocrystals impregnated with meso-tetrakis (4-nitrophenyl) porphyrin. *Iranian Chemical Communication*, 7, 53-62.

2018

1. Rahimi, R., Khosravi, M., Rabbani, M., & Safavi, E. (2018) Comparison of chelating ability of dipeptide (histidine- β -alanine) and (tetrakis (ν -sulfonatophenyl) porphyrin)(TPPS ν) for in vitro removal of toxic metals. *Iranian Chemical Communication*, 6, 1-7.
2. Mesgarzadeh, I., Akbarzadeh, A. R., Rahimi, R., & Maleki, A. (2018). Novel Design, Preparation, Characterization and Antimicrobial Activity of Silver Nanoparticles during Oak Acorns Bark Retrograde. *Zeitschrift für Physikalische Chemie*, 232(2), 209-221.
3. Kharazi, P., Rahimi, R., & Rabbani, M. (2018). Study on porphyrin/ZnFe₂O₄@polythiophene nanocomposite as a novel adsorbent and visible light driven photocatalyst for the removal of methylene blue and methyl orange. *Materials Research Bulletin*, 103, 133-141.
4. Jafari, H., Sadeghzadeh, S., Rabbani, M., & Rahimi, R. (2018). Effect of Nb on the structural, optical and photocatalytic properties of Al-doped ZnO thin films fabricated by the sol-gel method. *Ceramics International*, 44(16), 20107-20177.
5. Rabbani, M., Rahimi, R., & Ghadi, H. F. (2018). Photocatalytic application of BiFeO₃ synthesized via a facile microwave-assisted solution combustion method. *Journal of Sol-Gel Science and Technology*, 87(2), 340-346.
6. Aghakhaninejad, S., Rahimi, R., & Zargari, S. (2018). Application of BiVO₄ Nanocomposite for Photodegradation of Methyl Orange. Paper presented at the Multidisciplinary Digital Publishing Institute Proceedings.

2017

1. Mahboubeh Rabbani, Marzieh Haghverdi, Mahdi Heidari-Golafzani, Rahmatollah Rahimi, and Marziye Javaheri Kachousangi. "Preparation of a New Adsorbent Expanded Perlite@ ZnO@Reduced Graphene Oxide for the Synergistic Photocatalytic-Adsorption Removal of Organic Pollutants." *New Journal of Chemistry*, 41 (2017) 8011-8015.
2. Iraj Mesgarzadeh, Ali Reza Akbarzadeh, and Rahmatollah Rahimi. "Surface-Active Properties of Solvent-Extracted Panax Ginseng Saponin-Based Surfactants." *Journal of Surfactants and Detergents*, 20 (2017) 609-614.
3. Iraj Mesgarzadeh, Ali Reza Akbarzadeh, Rahmatollah Rahimi, and Ali Maleki. "Novel Design, Preparation, Characterization and Antimicrobial Activity of Silver Nanoparticles During Oak Acorns Bark Retrograde." *Zeitschrift für Physikalische Chemie*. (2017)

4. Maryam Khosravi, Rahmatollah Rahimi, Jalal Pour Ahmad, Mohammad Hadi Zareie, Mahboubeh Rabbani, "Comparision of kinetic study and protective effects of biological dipeptide and two porphyrin derivatives against metals cytotoxicity in human lymphocytes" Iranian Journal of Pharmaceutical Research, 6 (2017) 1059-1070.
5. Maryam Khosravi, Rahmatollah Rahimi, Mahboubeh Rabbani, Safavi, E. "MICROWAVE-ASSISTED SOLID-PHASE (SPPS) AND SOLUTION-PHASE (SPS) SYNTHESIS OF BIOLOGICAL DIPEPTIDE ((β -ALANINE-LHISTIDINE))." (2017) 8-18.
6. Maryam Khosravi, Rahmatollah Rahimi. Comparison of Kinetic Study and Protective Effects of Biological Dipeptide and Two Porphyrin Derivatives on Metal Cytotoxicity Toward Human Lymphocytes. Iranian journal of pharmaceutical research: IJPR, 2017, 16(3), 1059.
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