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Publications

Journals

- Farzaneh Qodrati-nasrabadi , Saeed Zakavi, "Core-substituted meso-tetraphenylporphyrin derivatives anchored to anatase nanoparticles with carboxylic acid as new water stable non-planar porphyrin photosensitizers: Mono para-substituted porphyrin vs. the tetra-substituted counterpart", Inorganic Chemistry Communications, Vol. 174, NO. 1, pp. 114039-114051, 4, 2025, doi: <https://doi.org/10.1016/j.inoche.2025.114039>
- Issa Sardivand-chegini, Saeed Zakavi, Mohammad Ali Rezvani, "Keggin-type polyoxometalates/Amberlite nanocomposites as efficient catalysts for the aqueous oxidation of sulfides: Crucial roles of mono-iron and mono-manganese substituents", Inorganic Chemistry Communications, Vol. 169, NO. 1, pp. 113076-113088, 9, 2024, doi: <https://doi.org/10.1016/j.inoche.2024.113076>
- Khaledian, Arash; Zakavi, Saeed, "Porphyrin photosensitizers compatible with both aqueous and non-aqueous conditions: Acid dependent spectral, solubility and photocatalytic properties of meso-tetra(pyridyl)porphyrins", Inorganic Chemistry Communications, Vol. 167, NO. 1, pp. 112727-112737, 6, 2024, doi: <https://doi.org/10.1016/j.inoche.2024.112727>
- Nasrin Ghanbari, Saeed Zakavi, "Photosensitizing activity of



phthalocyanine derivatives dispersed on nanostructured amberlyst 15: Free base vs. metal complexes", *Dyes and Pigments*, Vol. 224, NO. 1, pp. 111999-112010, 3, 2024, doi: <https://doi.org/10.1016/j.dyepig.2024.111999>

- Saeed Zakavi, Narges Nazari, Issa Sardivand-chegini, Farzaneh Qodrati-nasrabadi, "A porphyrin derivative with highly red shifted and intensified absorption bands immobilized into the mesopores of nanostructured amberlite: Synthesis, characterization and photocatalytic activity", *Journal of Photochemistry & Photobiology, A: Chemistry*, Vol. 442, NO. 1, pp. 114751-114761, 2023, doi: <https://doi.org/10.1016/j.jphotochem.2023.114751>
- S. Mohaddeseh Hosseini, Vahideh Lamepour-giglou, Saeed Zakavi, "Synthesis, characterization and application of a highly dispersed and reactive hypervalent iodine(V)/polyvinylpyrrolidone dendrimer nanocomposite: Hetero- vs. homo-intermolecular secondary O---I bonds", *Journal of Molecular Liquids*, Vol. 383, NO. 1, pp. 122141-122153, 5, 2023, doi: <https://doi.org/10.1016/j.molliq.2023.122141>
- Ali Mohammadi, Saeed Zakavi, Hamid Rashidzadeh, Neda Adibpour, Jaleh Karimi Moghadam, Behrooz Johari, Hossein Danafar, "The fabrication of albumin- Tetraphenylporphyrin-metronidazole nanosystem as potential photosensitizers/radiosensitizers for radiation-induced cancer therapy", *Inorganic Chemistry Communications*, Vol. 153, NO. 1, pp. 110841-110848, 5, 2023, doi: <https://doi.org/10.1016/j.inoche.2023.110841>
- Issa Sardivand-chegini, Saeed Zakavi,* and Mohammad Ali Rezvani, "Periodate-Mediated Aerobic Oxidation of Sulfides over a Bifunctional Porphyrin-polyoxometalate Catalyst: Photosensitized Singlet Oxygen Oxidation of Iodate to Periodate", *Inorganic Chemistry*, Vol. 62, NO. 33, pp. 13387-13399, 8, 2023, doi: <https://doi.org/10.1021/acs.inorgchem.3c01740>



- Ghanbari, Nasrin and Zakavi, Saeed, "A hypervalent iodine secondary oxidant synthesized by photosensitized singlet oxygen: Synthesis, characterization and oxidative reactivity", *Journal of Catalysis*, Vol. 405, NO. 3, 2022
- Mostafa Malek-mohammadi, Akram Heydari-turkmani, Saeed Zakavi, Nasser Nikfarjam, "Manganese porphyrins/mesoporous amberlyst 15 nanocomposites: Robust biomimetic catalysts for aqueous oxidation of olefins", *Applied Organometallic Chemistry*, 10, 2022, doi: <https://doi.org/10.1002/aoc.692710990739.0>, Downloaded from <https://onlinelibrary.wiley.com/doi/10.1002/aoc.6927> by Kwame Nkrumah Univ of Sci & Te, Wiley Online Library on [25/10/2022]. See the Term
- Nasrin Ghanbari, Saeed Zakavi, "A hypervalent iodine secondary oxidant synthesized by photosensitized singlet oxygen: Synthesis, characterization and oxidative reactivity", *Journal of Catalysis*, 12, 2021, doi: <https://doi.org/10.1016/j.jcat.2021.11.015>
- Fozeieh Nami, Aida G. Mojarrad, Saeed Zakavi , "Short time biomimetic oxidation of styrene with aqueous hydrogen peroxide: Crucial roles played by acetic acid", *Polyhedron*, Vol. 207, 10, 2021, doi: <https://doi.org/10.1016/j.poly.2021.115377>
- Aida G. Mojarrad and Saeed Zakavi , "Lewis acid induced spectral changes of sterically hindered and unhindered meso-tetra(aryl)porphyrins: fluorescence emission spectra", *New J. Chem.*, Vol. 44, 1, 2020, doi: <https://doi.org/10.1039/C9NJ06040E>
- Mojarrad, Aida G and Zakavi, Saeed, "Significantly Increased Stability of Donor--Acceptor Molecular Complexes under Heterogeneous Conditions: Synthesis, Characterization, and Photosensitizing Activity of a Nanostructured Porphyrin--Lewis Acid Adduct", *ACS Applied Materials & Interfaces*, Vol. 12, NO. 41, 2020



- Saeed Zakavi, Hadi Yavari, Akram Heydari-turkmani, Leila Alghooneh, "Effect of degree of β -chlorination on photocatalytic activity of meso-tetraphenylporphyrin under homogeneous and nanoscale heterogeneous conditions: Chlorination vs. bromination", *Journal of Catalysis*, Vol. 387, 4, 2020, doi: <https://doi.org/10.1016/j.jcat.2020.04.018>
- Aida G. Mojarrad and Saeed Zakavi, "Significantly Increased Stability of Donor–Acceptor Molecular Complexes under Heterogeneous Conditions: Synthesis, Characterization, and Photosensitizing Activity of a Nanostructured Porphyrin–Lewis Acid Adduct", *ACS Appl. Mater. Interfaces*, Vol. 12, NO. 41, 10, 2020, doi: <https://dx.doi.org/10.1021/acsami.0c13598>
- Zakavi, Saeed and Yavari, Hadi and Heydari-turkmani, Akram and Alghooneh, Leila, "Effect of degree of β -chlorination on photocatalytic activity of meso-tetraphenylporphyrin under homogeneous and nanoscale heterogeneous conditions: Chlorination vs. bromination", *Journal of catalysis*, Vol. 387, NO. 7, 2020
- Mojarrad, Aida G and Zakavi, Saeed, "Lewis acid induced spectral changes of sterically hindered and unhindered meso-tetra (aryl) porphyrins: fluorescence emission spectra", *New Journal of Chemistry*, Vol. 44, NO. 7, 2020
- Rahele Nasrollahi, Akram Heydari-turkmani and Saeed Zakavi, "Kinetic and mechanistic aspects of solid state, nanostructured porphyrin diacid photosensitizers in photooxidation of sulfides", *Catalysis Science & Technology*, Vol. 2019, NO. 5, 2, 2019, doi: [10.1039/C8CY02433B](https://doi.org/10.1039/C8CY02433B)
- Nasrollahi, Rahele and Heydari-turkmani, Akram and Zakavi, Saeed, "Electronic Supplementary Information for Kinetic and mechanistic aspects of solid state, nanostructured porphyrin diacid photosensitizers in photooxidation of sulfides", *Journal of Catalysis*, Vol. 380, NO. 23, 2019



- Zakavi, Saeed and Naderloo, Mortaza and Heydari-turkmani, Akram and Alghooneh, Leila and Eskandari, Mortaza, "Effects of β -bromine substitution and core protonation on photosensitizing properties of porphyrins: Long wavelength photosensitizers", Journal of Catalysis, Vol. 380, NO. 23, 2019
- Saeed Zakavi, Mortaza Naderloo, Akram Heydari-turkmani, Leila Alghooneh, Mortaza Eskandari, "Effects of β -bromine substitution and core protonation on photosensitizing properties of porphyrins: Long wavelength photosensitizers", Journal of Catalysis, 11, 2019, doi: <https://doi.org/10.1016/j.jcat.2019.10.005>
- Raheleh Nasrollahi, Luis Martín-Gomis, Fernando Fernández-Lázaro, Saeed Zakavi and Ángela Sastre-Santos , "Effect of the Number of Anchoring and Electron-Donating Groups on the Efficiency of Free-Base- and Zn-Porphyrin-Sensitized Solar Cells", Materials, Vol. 12, NO. 4, 2, 2019, doi: <https://doi.org/10.3390/ma12040650>
- Zahra Esfandiari bayat, Hajar Rahiminezhad and Saeed Zakavi, "Solvent effects on catalytic activity of manganese porphyrins with cationic, anionic and uncharged meso substituents: Indirect evidence on the nature of active oxidant species", Applied Organometallic Chemistry, Vol. 33, NO. 1, 1, 2019, doi: <https://doi.org/10.1002/aoc.4678>
- Khazaei, Saeede and Zakavi, Saeed, "Application of UV-Vis and NMR Spectra of Porphyrin Dications to the Investigation of the Structural Flexibility of Porphyrins Under Solution Conditions", Nashrieh Shimi va Mohandesi Shimi Iran, Vol. 38, NO. 3, 2019
- Talaeizadeh, Atefeh and Tofighi, Mahdi and Zakavi, Saeed, "A comparative study on the catalytic performance of heme and non-heme catalysts: Metal porphyrins versus metal Schiff bases", Applied Organometallic Chemistry, Vol. 32, NO. 1, 2018
- Zakavi, Saeed and Hashemi-Amiri, Akbar and Asadi, Fatemeh, "Axial base-controlled catalytic activity, oxidative stability and



product selectivity of water-insoluble manganese and iron porphyrins for oxidation of styrenes in water under green conditions", *Applied Organometallic Chemistry*, Vol. 32, NO. 3, 2018

- Zakavi, Saeed and Ebadi, Samira and Javanmard, Mohaddese, "Nanosized cationic and anionic manganese porphyrins as mesoporous catalysts for the oxidation of olefins: Nano versus bulk aggregates", *Applied Organometallic Chemistry*, Vol. 32, NO. 3, 2018
- Rasouli, Saifollah and Sakha, Fereshteh and Mojarrad, Aida G and Zakavi, Saeed, "Thermal nonlinear optical response of meso-tetraphenylporphyrin under aggregation conditions versus that in the absence of aggregation", *Journal of Modern Optics*, Vol. 65, NO. 8, 2018
- Choudhary, VR and Jha, R and Jana, P and Huh, SH and Shin, DG and Riu, DH and Jin, EJ and Kong, EB and Cho, KY and Kim, CY and others, "CATALYSIS COMMUNICATIONS VOLUME 10, NO. 2", *Catalysis Communications*, Vol. 10, NO. 2, 2018
- Sakha, Fereshteh and Mojarrad, Aida Ghanbelani and Yeganeh, Mohammad and Zakavi, Saeed and Rasouli, Saifollah, "Nonlinear refractive index measuring of the dication of meso-tetraphenylporphyrin with trifluoroacetic acid using double gratings interferometer and triple gratings moiré technique in pump-probe configuration", *Catalysis Communications*, Vol. 10, NO. 2, 2018
- Kamyabi, Mohammad Ali and Soleymani-Bonoti, Fatemeh and Zakavi, Saeed, "Determination of Stability Constants of Cadmium (II) Complexes with Diallyl Disulfide, Dimethyl Disulfide and Diallyl Sulfide Using Differential Pulse Voltammetry", *Russian Journal of Electrochemistry*, Vol. 54, NO. 1, 2018
- Alghooneh, Leila and Eskandari, Mortaza and Zakavi, Saeed and Omidyan, Reza, "Optical properties of β -brominated



meso-tetraphenylporphyrins: Comparative experimental and computational studies", *Journal of Porphyrins and Phthalocyanines*, Vol. 22, NO. 1, 2018

- Khazaei, Saeede and Eskandari, Mortaza and Zakavi, Saeed, "Computational and experimental insights into the oxidative stability of iron porphyrins: A mono-ortho-substituted iron porphyrin with unusually high oxidative stability", *Journal of Physical Organic Chemistry*, Vol. 22, NO. 1, 2018
- Mojarrad, Aida G and Zakavi, Saeed and Kazemi, S Habib, "Weak correlation between the redox properties of a series of manganese (III) porphyrins and their catalytic activity for oxidation of olefins with periodate", *Journal of Physical Organic Chemistry*, Vol. 22, NO. 1, 2018
- Zakavi, Saeed and others, "Synthesis, characterization and oxidizing strength of a nano-structured hypervalent iodine (v) compound: iodylbenzene nanofibers", *New Journal of Chemistry*, Vol. 42, NO. 23, 2018
- Esfandiari bayat, Zahra and Rahiminezhad, H and Zakavi, Saeed, "Solvent effects on catalytic activity of manganese porphyrins with cationic, anionic and uncharged meso substituents: Indirect evidence on the nature of active oxidant species", *Applied Organometallic Chemistry*, Vol. 42, NO. 23, 2018
- Rahele Nasrollahi and Saeed Zakavi, "Kinetics and mechanistic studies on the formation and reactivity of high valent MnO porphyrin species: mono-ortho or para-substituted porphyrins versus a di-ortho-substituted one", *New Journal of Chemistry*, Vol. 42, NO. 3, 2, 2018, doi: [10.1039/C7NJ04233G](https://doi.org/10.1039/C7NJ04233G)
- Reza Jafari motlagh and Saeed Zakavi, "Synthesis, characterization and oxidizing strength of a nano-structured hypervalent iodine(V) compound: iodylbenzene nanofibers", *New Journal of Chemistry*, Vol. 42, NO. 23, 10, 2018, doi: [10.1039/C8NJ04759F](https://doi.org/10.1039/C8NJ04759F)



- Aida G. Mojarrad and Saeed Zakavi, "Simple low cost porphyrinic photosensitizers for large scale chemoselective oxidation of sulfides to sulfoxides under green conditions: targeted protonation of porphyrins", *Catalysis Science & Technology*, Vol. 8, NO. 3, 2, 2018, doi: [10.1039/C7CY02308A](https://doi.org/10.1039/C7CY02308A)
- Akram Heydari-turkmani and Saeed Zakavi, "The first solid state porphyrin-weak acid molecular complex: A novel metal free, nanosized and porous photocatalyst for large scale aerobic oxidations in water", *Journal of Catalysis*, Vol. 364, 8, 2018, doi: <https://doi.org/10.1016/j.jcat.2018.06.011>
- Mojarrad, Aida Ghanbelanie and Zakavi, Saeed, "Simple low cost porphyrinic photosensitizers for large scale chemoselective oxidation of sulfides to sulfoxides under green conditions: Targeted protonation of porphyrins", *Catalysis Science & technology*, Vol. 32, NO. 3, 2017
- Zakavi, Saeed and Hoseini, Saiedeh and Mojarrad, Aida G, "New insights into the influence of weak and strong acids on the oxidative stability and photocatalytic activity of porphyrins", *New Journal of Chemistry*, Vol. 41, NO. 19, 2017
- Heydari-Turkmani, Akram and Zakavi, Saeed and Nikfarjam, Nasser, "Novel metal free porphyrinic photosensitizers supported on solvent-induced Amberlyst-15 nanoparticles with a porous structure", *New Journal of Chemistry*, Vol. 41, NO. 12, 2017
- Mojarrad, Aida G and Zakavi, Saeed, "Photocatalytic Activity of the Molecular Complexes of meso-Tetraarylporphyrins with Lewis Acids for the Oxidation of Olefins: Significant Effects of Lewis Acids and meso Substituents", *European Journal of Inorganic Chemistry*, Vol. 2017, NO. 21, 2017
- Nasrollahi, Rahele and Zakavi, Saeed, "Evidence on the Nature of the Active Oxidants Involved in the Oxidation of Alcohols with Oxone Catalyzed by an Electron-Deficient Manganese



Porphyrin: A Combined Kinetic and Mechanistic Study",
European Journal of Inorganic Chemistry, Vol. 2017, NO. 13,
2017

- Kamyabi, Mohammad Ali and SOLEYMANI, BONOTI FATEMEH and Zakavi, Saeed, "Voltammetric Study of Cd²⁺ Complexation with some Compounds of Garlic", ChemistrySelect, Vol. 1, NO. 20, 2017
- Rayati, Saeed and Bohloulbandi, Elaheh and Zakavi, Saeed, "Manganese (III) porphyrin anchored onto multiwall carbon nanotubes: An efficient and reusable catalyst for the heterogeneous reduction of aldehydes and ketones", Journal of Coordination Chemistry, Vol. 69, NO. 4, 2016
- Zakavi, Saeed and Hoseini, Saiedeh, "Solvent Tuning of the Optical Absorption and Fluorescence Properties of Meso--tetra (aryl) porphyrins and Their Dications With Weak and Strong Carboxylic Acids", ChemistrySelect, Vol. 1, NO. 20, 2016
- Mojarrad, Aida G and Zakavi, Saeed, "A novel porphyrinic photosensitizer based on the molecular complex of meso-tetraphenylporphyrin with 2, 3-dichloro-5, 6-dicyano-1, 4-benzoquinone: higher photocatalytic activity, photooxidative stability and solubility in non-chlorinated solvents", RSC advances, Vol. 6, NO. 103, 2016
- Zakavi, Saeed and Motlagh, Reza Jafari, "Synthesis, Characterization and Reactivity of Iodosylbenzene Nanoparticles as a New Nano--reagent", ChemistrySelect, Vol. 1, NO. 15, 2016
- Zakavi, Saeed and Omidyan, Reza and Talebzadeh, Sadegh, "The influence of protonation on the structure and spectral properties of porphine: UV-vis, 1 H NMR and ab initio studies", RSC advances, Vol. 6, NO. 85, 2016
- Kamyabi, Mohammad Ali and Soleymani-Bonoti, Fatemeh and Zakavi, Saeed, "Voltammetric determination of stability



- constants of lead complexes with diallyl disulfide, dimethyl disulfide, and diallyl sulfide", Chinese Chemical Letters, Vol. 27, NO. 1, 2016
- Rayati, Saeed and Bohloulbandi, Elaheh and Zakavi, Saeed, "Sodium borohydride reduction of aldehydes catalyzed by an oxovanadium (IV) Schiff base complex encapsulated in the nanocavity of zeolite-Y", Inorganic Chemistry Communications, Vol. 54, NO. 9, 2015
 - Zakavi, Saeed and Hoseini, Saiedeh, "The absorption and fluorescence emission spectra of meso-tetra (aryl) porphyrin dications with weak and strong carboxylic acids: a comparative study", RSC advances, Vol. 5, NO. 129, 2015
 - Shahroosvand, Hashem and Zakavi, Saeed and Sousaraei, Ahmad and Mohajerani, Ezeddin and Mahmoudi, Malek, "Unusual near-white electroluminescence of light emitting diodes based on saddle-shaped porphyrins", Dalton Transactions, Vol. 44, NO. 18, 2015
 - Shahroosvand, Hashem and Zakavi, Saeed and Sousaraei, Ahmad and Eskandari, Mortaza, "Saddle-shaped porphyrins for dye-sensitized solar cells: new insight into the relationship between nonplanarity and photovoltaic properties", Physical Chemistry Chemical Physics, Vol. 17, NO. 9, 2015
 - Kazemi, SH and Hosseinzadeh, B and Zakavi, S, "Electrochemical fabrication of conducting polymer of Ni-porphyrin as nano-structured electrocatalyst for hydrazine oxidation", Sensors and Actuators B: Chemical, Vol. 210, NO. 7, 2015
 - Rayati, Saeed and Bohloulbandi, Elaheh and Zakavi, Saeed and Jafarian, Majid and Rashvand Avei, Mehdi, "Partial and Full β -Chlorination of Meso-Tetraphenylporphyrin: Effects on the Catalytic Activity of the Manganese Complexes for Oxidation of Organic Compounds with Periodate", Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal



Chemistry, Vol. 45, NO. 7, 2015

- Zakavi, Saeed and Kayhomayoon, Zohreh and Rayati, Saeed, "Substrate-dependent order of catalytic activity for a series of Fe (III) and Mn (III) porphyrins in the oxidation of organic sulfides and olefins with periodate", Journal of the Iranian Chemical Society, Vol. 12, NO. 5, 2015
- Rayati, Saeed and Zakavi, Saeed and Valinejad, Hossein, "Oxidation of hydrocarbons with tetra-n-butylammonium peroxy monosulfate catalyzed by β -tetrabromo-meso-tetrakis (4-methoxyphenyl)- and β -tetrabromo-meso-tetraphenylporphyrinatomanganese (III)", Turkish Journal of Chemistry, Vol. 38, NO. 4, 2014
- Mohammadi, Masoomeh and Zakavi, Saeed and Poorheravi, Mohammad Reza and Jamehbozorgi, Saeed, "Preparation of CuO nanostructure by direct thermolyses of a metal-organic framework (MOF)", journal of physical organic chemistry, Vol. 22, NO. 1, 2014
- Rayati, Saeed and Nejabat, Fatemeh and Zakavi, Saeed, "Chemoselective oxidation of sulfides to sulfoxides with urea hydrogen peroxide (UHP) catalyzed by non-, partially and fully β -brominated meso-tetraphenylporphyrinatomanganese (III) acetate", Inorganic Chemistry Communications, Vol. 40, NO. 6, 2014
- Mohammadi, Masoomeh and Zakavi, Saeed and Poorheravi, Mohammad Reza and Jamehbozorgi, Saeed, "Synthesis, characterization, and an Ab initio and DFT study of a Copper with Benzoic acid derivatives", journal of physical organic chemistry, Vol. 22, NO. 1, 2014
- Zakavi, Saeed and Fathi, Mahdieh, "Oxidation of olefins and sulfides with different oxidants catalyzed by meso-tetra (n-propyl) porphyrinatomanganese (III) acetate: comparison with meso-tetra (phenyl) porphyrinatomanganese (III) acetate", Journal of the Iranian Chemical Society, Vol. 11, NO. 6, 2014



- Hoseini, Saiedeh and Zakavi, Saeed, "Effect of core protonation on the intensity of the Soret and Q (0, 0) bands of meso-tetraarylporphyrins", *Journal of physical organic chemistry*, Vol. 22, NO. 1, 2014
- Zakavi, Saeed and Yazdeli, Tahereh Mokary, "Stereo-electronic effects of the meso-substituents on the catalytic performance of iron (III) meso-tetraarylporphyrins: Pyridyl and N-methylated pyridyl groups compared to phenyl, 4-methoxyphenyl and 4-sulfonatophenyl ones", *Journal of Molecular Catalysis A: Chemical*, Vol. 367, NO. 2, 2013
- Zakavi, Saeed and Omidyan, Reza and Talebzadeh, Sadegh, "Porphine core saddling: Effects on the HOMO/LUMO gap and the macrocycle bond lengths and bond angles", *Polyhedron*, Vol. 49, NO. 1, 2013
- Rayati, Saeed and Jafarzadeh, Parisa and Zakavi, Saeed, "Catalytic activity of carbon nanotube supported iron (III) and manganese (III) porphyrins in oxidation of olefins with tert-butyl hydroperoxide: Higher activity of the iron (III) porphyrin", *Inorganic Chemistry Communications*, Vol. 29, NO. 3, 2013
- Zakavi, Saeed and Ragheb, Mahshad Najafi, "Interaction of meso-tetraarylporphyrins with formic acid: A variable temperature ^1H NMR study", *Inorganic Chemistry Communications*, Vol. 36, NO. 6, 2013
- Zakavi, Saeed and Rahiminezhad, Hajar and Mojarrad, Aida Ghanbelanie and Yazdeli, Tahereh Mokary and Alizadeh, Robabeh, "Research Article Effects of Core and/or Peripheral Protonation of meso-Tetra (2-, 3-, and 4-pyridyl) Porphyrin and meso-Tetra (3-methylpyridyl) Porphyrin on Their UV-vis Spectra", *Inorganic Chemistry Communications*, Vol. 36, NO. 6, 2013
- Zakavi, Saeed and Rahiminezhad, Hajar and Ghanbelanie Mojarrad, Aida and Mokary Yazdeli, Tahereh and Alizadeh,



- Robabeh, "Effects of Core and/or Peripheral Protonation of meso-Tetra (2-, 3-, and 4-pyridyl) Porphyrin and meso-Tetra (3-methylpyridyl) Porphyrin on Their UV-vis Spectra", *Journal of Spectroscopy*, Vol. 2013, NO. 6, 2013
- Zakavi, Saeed and Abasi, Azam and Pourali, Ali Reza and Talebzadeh, Sadegh, "Metalloporphyrin-Catalyzed Chemoselective Oxidation of Sulfides with Polyvinylpyrrolidone-Supported Hydrogen Peroxide: Simple Catalytic System for Selective Oxidation of Sulfides to Sulfoxides", *Bulletin of the Korean Chemical Society*, Vol. 33, NO. 1, 2012
 - Rayati, Saeed and Zakavi, Saeed and Bohloulbandi, Elaheh and Jafarian, Majid and others, "Comparative study of the catalytic activity of a series of β -brominated Mn--porphyrins in the oxidation of olefins and organic sulfides: Better catalytic performance of the partially brominated ones", *Polyhedron*, Vol. 34, NO. 1, 2012
 - Rayati, Saeed and Zakavi, Saeed and Jafarzadeh, Parisa and Sadeghi, Omid and Amini, Mostafa M, "Manganese meso-tetra-4-carboxyphenylporphyrin immobilized on MCM-41 as catalyst for oxidation of olefins with different oxygen donors in stoichiometric conditions", *Journal of Porphyrins and Phthalocyanines*, Vol. 16, NO. 3, 2012
 - Zakavi, Saeed and Ragheb, Mahshad Najafi and Rafiee, Mohammad, "Electrochemical study of the dication of porphyrins with carboxylic acids: Shift of the absorption bands compared to that of the redox potentials", *Inorganic Chemistry Communications*, Vol. 22, NO. 2, 2012
 - Zakavi, Saeed and Mojarrad, Aida Ghanbelanie and Yazdely, Tahere Mokary, "Facile Purification of meso-Tetra (pyridyl) porphyrins and Detection of Unreacted Porphyrin upon Metallation of meso-Tetra (aryl) porphyrins", *Macroheterocycles*, Vol. 5, NO. 1, 2012
 - Zakavi, Saeed and Mojarrad, Aida Ghanbelanie and Rayati,



- Saeed, "Substituent effects on the catalytic activity of a series of manganese meso-tetra (aryl) porphyrins:(2-, 3-, 4)-Pyridyl, 4-sulfonatophenyl and 3-sulfonato-4-methoxyphenyl groups compared to phenyl and 4-methoxyphenyl ones", *Journal of Molecular Catalysis A: Chemical*, Vol. 363, NO. 3, 2012
- Zakavi, Saeed and Talebzadeh, Sadegh and Rayati, Saeed, "Catalytic activity of Mn (III) and Fe (III) complexes of meso-tetra (n-propyl) porphyrin in oxidation of olefins: Meso-alkyl substituent in comparison with the alkenyl and aryl ones", *Polyhedron*, Vol. 31, NO. 1, 2012
 - Rayati, Saeed and Zakavi, Saeed and Kalantari, Hossein, "Factors influencing the catalytic activity of β -tetrabrominated meso-tetra (para-tolyl) porphyrinatomanganese (III) for oxidation of sulfides and olefins with Oxone", *Journal of Porphyrins and Phthalocyanines*, Vol. 15, NO. 2, 2011
 - Ajloo, Davood and Hajipour, Samaneh and Saboury, Ali Akbar and Zakavi, Saeed, "Effect of cationic and anionic porphyrins on the structure and activity of adenosine deaminase", *Bulletin of the Korean Chemical Society*, Vol. 32, NO. 9, 2011
 - Zakavi, Saeed and Omidyan, Reza and Ebrahimi, Leila and Heidarizadi, Fatemeh, "Substitution effects on the UV-vis and ^1H NMR spectra of the dications of meso and/or β substituted porphyrins with trifluoroacetic acid: Electron-deficient porphyrins compared to the electron-rich ones", *Inorganic Chemistry Communications*, Vol. 14, NO. 11, 2011
 - Zakavi, Saeed and Heidarizadi, Fatemeh and Rayati, Saeed, "Comparative study of catalytic activity of some biomimetic models of cytochrome P450 in oxidation of olefins with tetra-n-butylammonium periodate: electron-rich Mn-porphyrins versus the electron-deficient ones", *Inorganic Chemistry Communications*, Vol. 14, NO. 6, 2011
 - Zakavi, Saeed and Ebrahimi, Leila, "Substitution effects on the



- catalytic activity of Mn (III)-porphyrins in epoxidation of alkenes with iodosylbenzene: a comparison between the electron-rich and electron-deficient porphyrins", *Polyhedron*, Vol. 30, NO. 10, 2011
- Zakavi, Saeed and Ashtiani, Amir Salami and Rayati, Saeed, "Meso-tetracinnamylporphyrin: Synthesis, characterization and the catalytic activity of its Mn (III) complex in olefin epoxidation with tetra-n-butylammonium hydrogen monopersulfate", *Polyhedron*, Vol. 29, NO. 5, 2010
 - Rayati, Saeed and Zakavi, Saeed and Noroozi, Vahid, "Nitrogen donor-controlled chemoselectivity of reaction in oxidation of sulfides with tetra-n-butylammonium hydrogen monopersulfate catalyzed by a partially β -brominated meso-tetraphenylporphyrinatomanganese (III) acetate: a clue to the nature of active oxidant", *Journal of Sulfur Chemistry*, Vol. 31, NO. 2, 2010
 - Rayati, Saeed and Zakavi, Saeed and Koliaei, Marjan and Wojtczak, Andrzej and Kozakiewicz, Anna, "Electron-rich salen-type Schiff base complexes of Cu (II) as catalysts for oxidation of cyclooctene and styrene with tert-butylhydroperoxide: A comparison with electron-deficient ones", *Inorganic Chemistry Communications*, Vol. 13, NO. 1, 2010
 - Zakavi, Saeed and Rahiminezhad, Hajar and Alizadeh, Robabeh, "Hydrogen bond controlled adduct formation of meso-tetra (4-sulfonatophenyl) porphyrin with protic acids: A UV-vis spectroscopic study", *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 77, NO. 5, 2010
 - Zakavi, Saeed and Karimipour, Gholam Reza and Gharab, Nasrin Gholami, "Meso-tetraarylporphyrin catalyzed highly regioselective ring opening of epoxides with acetic acid", *Catalysis Communications*, Vol. 10, NO. 4, 2009
 - Ghaemi, Akbar and Rayati, Saeed and Zakavi, Saeed and Safari, Nasser, "Highly efficient oxidation of sulfides to sulfones



- with tetra-n-butylammonium hydrogen monopersulfate catalyzed by β -tri- and tetra-brominated meso-tetraphenylporphyrinatomanganese (III) acetate", *Applied Catalysis A: General*, Vol. 353, NO. 2, 2009
- Rayati, Saeed and Zakavi, Saeed and Noroozi, Vahid and Motlagh, Somayeh H, "Electron-deficient Mn (III)-porphyrin catalyzed oxidation of hydrocarbons with tetra-n-butylammonium hydrogen monopersulfate: effect of counter ions and nitrogen donors", *Catalysis Communications*, Vol. 10, NO. 2, 2008
 - Zakavi, Saeed and Abasi, Azam and Pourali, Ali Reza and Rayati, Saeed, "Mn-prophyrin Catalyzed Epoxidation of Alkenes with Polyvinylpyrrolidone-Supported H₂O₂", *Bulletin of the Korean Chemical Society*, Vol. 29, NO. 4, 2008
 - Rayati, Saeed and Zakavi, Saeed and Ghaemi, Akbar and Carroll, Patrick J, "Core protonation of meso-tetraphenylporphyrin with tetrafluoroboric acid: unusual water-mediated hydrogen bonding of H₄tpp²⁺ to the counterion", *Tetrahedron Letters*, Vol. 49, NO. 4, 2008
 - Rayati, Saeed and Zakavi, Saeed and Motlagh, Somayeh H and Noroozi, Vahid and Razmjoo, Maryam and Wojtczak, Andrzej and Kozakiewicz, Anna, " β -Tetra-brominated meso-tetraphenylporphyrin: a conformational study and application to the Mn-porphyrin catalyzed epoxidation of olefins with tetrabutylammonium oxone", *Polyhedron*, Vol. 27, NO. 11, 2008
 - Mohajer, Daryoush and Sakhtemanian, Elham and Rayati, Saeed and Zakavi, Saeed, "A UV-vis spectroscopic study of 1: 2 adduct formation of some free-base meso-tetraaryl- and meso-tetraalkylporphyrins with PhSnCl₃ and (CH₃)₂SnCl₂", *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, Vol. 69, NO. 3, 2008
 - Karimipour, Gholam Reza and Karami, Bahador and MONTAZEROZOHORI, Morteza and Zakavi, Saeed, "Oxidative



decarboxylation of carboxylic acids with tetrabutylammonium periodate catalyzed by manganese (III) meso-tetraarylporphyrins: effect of metals, meso-substituents, and anionic axial ligands", Chinese Journal of Catalysis, Vol. 28, NO. 11, 2007

- Trolley, Zuid-Amerikaanse Stijl Supermarkt Winkelwagen and Karimipour, G and Karami, B and Montazerzohori, M and Zakavi, S, "Oxidative decarboxylation of carboxylic acids with tetrabutylammonium periodate catalyzed by manganese (III) meso-tetraarylporphyrins: effect of metals, meso-substituents, and anionic axial ligands", Chin J Catal, Vol. 28, NO. 11, 2007
- Zakavi, Saeed and Gharab, Nasrin Gholami, "Interaction of para-substituted meso-tetraphenylporphyrins and meso-tetra (n-propyl) porphyrin with weak and strong carboxylic acids: A UV-Vis spectroscopic study", Polyhedron, Vol. 26, NO. 12, 2007
- Rayati, Saeed and Mohajer, Daryoush and Zakavi, Saeed, "POSTER PRESENTATIONS-A UV-vis spectroscopic study of 1: 2 adduct formation of some free-base meso-tetraaryl- and meso-tetraalkylporphyrins with PhSnCl_3 and $(\text{CH}_3)_2\text{SnCl}_2$ versus CF_3COOH ", Journal of Porphyrins and Phthalocyanines, Vol. 10, NO. 4, 2006
- Mohajer, Daryoush and Zakavi, Saeed and Rayati, Saeed and Zahedi, Mansour and Safari, Nasser and Khavasi, Hamid Reza and Shahbazian, Shant, "Unique 1: 2 adduct formation of meso-tetraarylporphyrins and meso-tetraalkylporphyrins with BF_3 : a spectroscopic and ab initio study", New Journal of Chemistry, Vol. 28, NO. 12, 2004

Conferences

- Arash Khaledian and Saeed Zakavi*, "Photocatalytic activity of alumina supported meso-tetra(3-pyridyl)porphyrin", 22nd Iranian Inorganic Chemistry Conference, University of Kurdistan, Sanandaj, Iran., 8, 2023



- Issa Sardivand-chegini, a Farzaneh Qodrati-nasrabadib and Saeed Zakavi*, "The effect of light on manganese porphyrin catalyzed oxidation of olefins with periodate under different conditions", 22nd Iranian Inorganic Chemistry Conference, University of Kurdistan, Sanandaj, Iran., 8, 2023
- Elham Kharrati and Saeed Zakavi*, "Aerobic photooxidation of 1,3-diphenylisobenzofuran in the presence of manganese and iron porphyrins", 22nd Iranian Inorganic Chemistry Conference, University of Kurdistan, Sanandaj, Iran., 8, 2023
- Vahideh Lamepour-giglou and Saeed Zakavi*, "Oxidation of organic compounds with nanostructured iodosylbenzene catalyzed by manganese porphyrins", 22nd Iranian Inorganic Chemistry Conference, University of Kurdistan, Sanandaj, Iran., 8, 2023
- S. Mohaddeseh Hosseini, Saeed Zakavi, "Efficient Non-catalytic Oxidation of 1,5-Dihydroxynaphthalene with Iodosylbenzene in Water and the Presence of Polyvinylpyrrolidone", 10th National Seminar of Chemistry and Environment (Webinar), pp. 1-1, 11, 2021
- S. Farzaneh Qodrati-Nasrabad, Akram Heydari-turkmani, Saeed Zakavi, "Aqueous Photooxidation of 1,5-Dihydroxynaphthalene to Juglone Under Heterogeneous Conditions", 10th National Seminar of Chemistry and Environment (Webinar), pp. 1-1, 11, 2021
- Saeed Zakavi, "Transition Metal-based Catalysts: An Overview", 1st Iranian Catalyst Conference (Invited Speaker), pp. 1-1, 9, 2018
- Saeed Zakavi, "Biomimetic Oxidation of Organic Compounds: History and Applications", 19th Iranian Inorganic Chemistry Conference (Invited Speaker), pp. 1-1, 9, 2017

