# Mostafa Heidari Majd, Ph.D of Medicinal Chemistry

Associate Professor

Current affiliation:

- Zabol University of Medical Sciences, Zabol, Iran until present

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Date of birth 23 December 1979



https://www.scopus.com/authid/detail.uri?authorId=57188553782 https://scholar.google.com/citations?user=exPvGZsAAAAJ&hl=en&oi=ao https://publons.com/researcher/2247823/mostafa-heidari-majd/ https://publons.com/researcher/J-5694-2016/ https://www.researchgate.net/profile/Mostafa\_Heidari\_Majd3

## **Education Experience**

Dec 2012 – present

Medicinal Chemistry 1, 2, 3 - Organic Chemistry 1, 2 - General Chemistry - Analytical Chemistry - Instrumental Analysis Chemistry - Physicochemical Control

### **Research Experience**

Dec 2012 – present

at Faculty of Pharmacy

Zabol University of Medical Sciences, Zabol, Iran

#### Awards & Grants

Second Prize for Research in the Faculty of Pharmacy, Zabol University of Medical Sciences, 2015 First Prize for Research in the Faculty of Pharmacy, Zabol University of Medical Sciences, 2016 First Prize for Education in the Faculty of Pharmacy, Zabol University of Medical Sciences, 2016 Second Prize for Research in Zabol University of Medical Sciences (overall), 2018 First Prize for Education in the Faculty of Pharmacy, Zabol University of Medical Sciences, 2019 Fourth Prize for Research in Zabol University of Medical Sciences (overall), 2018 First Prize for Research in Zabol University of Medical Sciences (overall), 2018

#### Skills & Activities

Skills Synthesis of Nanoparticle, Drug Delivery, Real Time PCR, Cell Culture, Green Nanomaterials,
Flow Cytometry, Gene Expression, Cancer Cells, Drug Release, Synthesis of Metallo complexes,
Synthesis of Host-Guest Supramolecular magnetic nanoparticles, Synthesis of Hydrophilic
nanoparticles by Hyaluronic acid, Molecular Modeling, Lipid peroxidation, Synthesis of green
Nanoparticle by plant extracts

### **Publication Highlights**

For manuscripts published from date range December 2012 - December 2021 CITATIONS 494 H-INDEX 15 PUBLICATIONS 33

The role of folic acid in inducing of apoptosis by zinc(II) complex in ovary and cervix cancer cells Published: 2021 in Molecular Diversity DOI: 10.1007/s11030-021-10293-5

Investigation on protective effects of magnetic nanoparticles containing methotrexate and tamoxifen in inhibition of hepatocyte toxicity and induction of apoptosis Published: 2021 in Latin American Journal of Pharmacy DOI:

The in vitro apoptotic effect of new zinc complex possessing folic acid and phenanthroline on cervix cancer cells Published: 2021 in Applied Organometallic Chemistry DOI: 10.1002/aoc.6525

Evaluation of Induced Apoptosis by Biosynthesized Zinc Oxide Nanoparticles in MCF-7 Breast Cancer Cells Using Bak1 and Bclx Expression Published: September 2021 in Doklady Biochemistry and Biophysics, DOI: 10.1134/S1607672921050148 In Vitro Apoptosis Evaluation and Kinetic Modeling onto Cyclodextrin-Based Host-Guest Magnetic Nanoparticles Containing Methotrexate and Tamoxifen Published: Jun 2021 in BioNanoScience DOI: 10.1007/S12668-021-00877-8

Investigation and comparison of biological effects of regioselectively synthesized thiazole derivatives Published: Apr 2021 in Journal of Heterocyclic Chemistry DOI: 10.1002/JHET.4278

Palladium and platinum complexes of folic acid as new drug delivery systems for treatment of breast cancer cells Published: Apr 2021 in Journal of Molecular Structure DOI: 10.1016/J.MOLSTRUC.2020.129806

Kinetic Modeling on Mitoxantrone Release from Hyaluronic MNP as a Drug Delivery System Published: Jan 2021 in Chemical Methodologies DOI: 10.22034/CHEMM.2021.118506

Synthesis and Apoptotic Efficacy of Biosynthesized Silver Nanoparticles Using Acacia Luciana Flower Extract in MCF-7 Breast Cancer Cells: Activation of Bak1 and Bclx for Cancer Therapy Published: Sep 2020 in BioNanoScience DOI: 10.1007/S12668-020-00753-X

Synthesis of new ultrasonic-assisted palladium oxide nanoparticles: an in vitro evaluation on cytotoxicity and DNA/BSA binding properties Published: Nov 2019 in Journal of Biomolecular Structure and Dynamics DOI: 10.1080/07391102.2018.1546619

Anti-cancer study and whey protein complexation of new lanthanum(III) complex with the aim of achieving bioactive anticancer metal-based drugs Published: May 2019 in Journal of Biomolecular Structure and Dynamics DOI: 10.1080/07391102.2018.1476266

Synthesis and characterization of highly efficacious Fe-doped ceria nanoparticles for cytotoxic and antifungal activity Published: Apr 2019 in Ceramics International DOI: 10.1016/J.CERAMINT.2019.01.108

A comparative study of the impact of metal complex size on the in vitro biological behavior of hetero diand poly-nuclear Mn-Co complexes Published: Feb 2019 in Journal of Molecular Structure DOI: 10.1016/J.MOLSTRUC.2018.10.074 Novel tetradentate Schiff base zinc(II) complex as a potential antioxidant and cancer chemotherapeutic agent: Insights from the photophysical and computational approach Published: Feb 2019 in Journal of Molecular Structure DOI: 10.1016/J.MOLSTRUC.2018.10.005

Investigating the biological potency of novel lanthanum(III) amino acid complex: MCF-7 breast cancer cell line, BSA and beta-LG as targets Published: Feb 2019 in Journal of the Iranian Chemical Society DOI: 10.1007/S13738-018-1508-7

Hyaluronan magnetic nanoparticle for mitoxantrone delivery toward CD44- positive cancer cells Published: Nov 2018 in Colloids and Surfaces B: Biointerfaces DOI: 10.1016/J.COLSURFB.2018.07.025

Evaluation of supramolecule conjugated magnetic nanoparticles as a simultaneous carrier for methotrexate and tamoxifen Published: Oct 2018 in Journal of Drug Delivery Science and Technology DOI: 10.1016/J.JDDST.2018.07.006

Palladium(II) complexes of biorelevant ligands. Synthesis, structures, cytotoxicity and rich DNA/HSA interaction studies Published: Aug 2018 in Journal of Biomolecular Structure and Dynamics DOI: 10.1080/07391102.2017.1372309

Hyaluronic acid/polyethylene glycol nanoparticles for controlled delivery of mitoxantrone Published: May 2018 in Artificial Cells, Nanomedicine, and Biotechnology DOI: 10.1080/21691401.2017.1324462

Comparative study on the anticancer activities and binding properties of a hetero metal binuclear complex [Co(dipic)(2)Ni(OH2)(5)]center dot 2H(2)O (dipic = dipicolinate) with two carrier proteins Published: Oct 2017 in Journal of Pharmaceutical and Biomedical Analysis DOI: 10.1016/J.JPBA.2017.06.067

Evaluation of host-guest system to enhance the tamoxifen efficiency Published: May 2017 in Artificial Cells, Nanomedicine, and Biotechnology DOI: 10.3109/21691401.2016.1160916

Exploring isoxsuprine hydrochloride binding with human serum albumin in the presence of folic acid and ascorbic acid using multispectroscopic and molecular modeling methods Published: May 2017 in Journal of Photochemistry and Photobiology B: Biology DOI: 10.1016/J.JPHOTOBIOL.2017.04.007 Different Applications of Magnetic Nanoparticles in the Rapid Monitoring of Ochratoxin A Published: Feb 2017 in Oriental Journal of Chemistry DOI: 10.13005/OJC/330141

A Simple and Fast Method for Magnetic Solid Phase Extraction of Ochratoxin A Published: 2017 in Journal of the Brazilian Chemical Society DOI: 10.21577/0103-5053.20160245

Investigating the Apoptosis Ability of Ethylenediamine 8-Hydroxyquinolinato Palladium (II) Complex Published: 2016 in Advanced Pharmaceutical Bulletin DOI: 10.15171/APB.2016.058

Synthesis, characterization, in vitro cytotoxicity, in silico ADMET analysis and interaction studies of 5dithiocarbamato-1,3,4-thiadiazole-2-thiol and its zinc( ii ) complex with human serum albumin: combined spectroscopy and molecular docking investigations Published: 2016 in RSC Advances DOI: 10.1039/C6RA17322E

Multifunctional mitoxantrone-conjugated magnetic nanosystem for targeted therapy of folate receptoroverexpressing malignant cells (vol 13, 26, 2015) Published: Sep 2015 in Journal of Nanobiotechnology DOI: 10.1186/S12951-015-0108-2

Multifunctional mitoxantrone-conjugated magnetic nanosystem for targeted therapy of folate receptoroverexpressing malignant cells Published: Mar 2015 in Journal of Nanobiotechnology DOI: 10.1186/S12951-015-0083-7

SPECIFIC TARGETING OF FOLATE RECEPTOR BY METHOTREXATE CONJUGATED MODIFIED MAGNETIC NANOPARTICLES: ENZYMATIC RELEASE AND CYTOTOXIC STUDY Published: 2015 in International Journal of Pharmaceutical Sciences and Research DOI: 10.13040/IJPSR.0975-8232.6(12).5047-55

Fe3O4 nanoparticles engineered for plasmid DNA delivery to Escherichia coli Published: Jul 2014 in Journal of Nanoparticle Research DOI: 10.1007/S11051-014-2521-0

Synthesis, Cytotoxicity and DNA Binding of Novel Binuclear Antitumor Complexes Formed by Linking Two "2,2'- Bipyridine Palladium (II)" Moieties Via Alkylene Bisdithiocarbamates Published: 2014 in Asian Journal of Pharmaceutical Technology and Innovation Tamoxifen loaded folic acid armed PEGylated magnetic nanoparticles for targeted imaging and therapy of cancer Published: Jun 2013 in Colloids and Surfaces B: Biointerfaces DOI: 10.1016/J.COLSURFB.2013.01.051

Targeted Fluoromagnetic Nanoparticles for Imaging of Breast Cancer MCF-7 Cells Published: Jun 2013 in Advanced Pharmaceutical Bulletin DOI: 10.5681/APB.2013.031

Specific targeting of cancer cells by multifunctional mitoxantrone-conjugated magnetic nanoparticles Published: May 2013 in Journal of Drug Targeting DOI: 10.3109/1061186X.2012.750325