

**In the name of God**  
**Summary of the scientific-research certificate of the faculty**  
**members and researchers**  
**Endocrinology and Metabolism Research Institute**  
**Shahid Beheshti University of Medical Sciences**



<p><b>Name: Farzaneh</b></p> <p><b>Family name: Motafeghi</b></p>	<p><b>Scopus ID number:</b></p> <p>Scopus ID number: 57219404019</p> <p><a href="https://scholar.google.com/citations?user=9vh1svUAAAJ&amp;hl=en">https://scholar.google.com/citations?user=9vh1svUAAAJ&amp;hl=en</a></p> <p><a href="https://www.researchgate.net/profile/Farzaneh-Motafeghi-2">https://www.researchgate.net/profile/Farzaneh-Motafeghi-2</a></p> <p><a href="https://orcid.org/0000-0001-5756-7575">https://orcid.org/0000-0001-5756-7575</a></p>
<p><b>H-Index: 9</b></p>	<p><b>Total number of citations to articles: 162</b></p> <p><b>Number of citations to articles in 2024: 12</b></p>
<p><b>Total number of research projects: 65</b></p> <p><b>Number of research projects in the role of executor: 1</b></p>	<p><b>Total number of articles: 32</b></p> <p><b>Number of articles by the first author/responsible: 20</b></p> <p><b>Number of articles in 2024: 1</b></p>

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### 1. Personal Information:

<b>Name:</b> Farzaneh	<b>Date of birth:</b>	<b>National Code:</b> 1270576917
<b>Last name:</b> Motafeghi	<b>08/08/1990</b>	
<b>Identity Card No:</b> 1270576917	<b>Place of Birth:</b> Isfahan	<b>Father Name:</b> Sayed Jafar
<b>Email:</b> <a href="mailto:farzaneh.motafeghi@gmail.com">farzaneh.motafeghi@gmail.com</a> <a href="mailto:f.motafeghi@endocrine.ac.ir">f.motafeghi@endocrine.ac.ir</a>	<b>Mobile phone no:</b> 09122703204	

### 2- Academic records / training courses

Grade	Education / orientation	Duration of study		University name	Country / city of study
		Start	End		
Bachelor of Science	Microbiology	2010	2014	Alzahra University	Tehran - Iran
Master of Science	Toxicology	2016	2018	Shahreza Islamic Azad University – IAUSH	Isfahan- Iran
Ph.D	Pharmaceutical Toxicology	2019	2023	Mazandaran University of Medical Science	Sari-Iran
Post-doctoral Researcher	Endocrinology	2023		Shahid Beheshti University of Medical Science	Tehran - Iran

### 3. Employment Status:

<b>Faculty members and formal researchers</b>			
<b>Contract researchers</b>			
<b>Work start date</b>	<b>contract type</b>	<b>Researcher rank</b>	<b>Last upgrade date</b>

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#### 4. Educational experience:

##### 4.1. Teaching in short courses / educational-research workshops

No.	Course / workshop title	Date	Organization	Teaching title
1	Teaching assistant	2018-2019	Mazandaran university of medical sciences	* Practical Toxicology (Bachelor of Laboratory Sciences - Master of Toxicology - doctorate in Pharmacy)  *Poisoning control (doctorate in pharmacy)
2	Cell culture workshop	2020	Mazandaran university of medical sciences	Cell culture workshop, types of cell tests and evaluation of cell viability

#### 5. Research Activities:

##### 5.1. Writing a book / part of a foreign book

No.	Book Title	Editor	Publisher / place of publication / year of publication
.۱	Nanotechnology and toxicology of nanoparticles	authorship	Nowruzi Publications-2016
.۲	Nanocarriers and drug release systems	authorship	Nowruzi Publications-2016
.۳	Pharmacognosy algorithm	authorship	Dr. Khalili's authoring group - 2017 (second edition)
.۴	Textbook of toxicology and pharmacology	authorship	Scientific Publications of the sana,-2018
.۵	IQB PhD in Pharmacy	authorship	Author group of Dr. Khalili - 2018
.۶	Therapeutic chart	authorship	Scientific Publications of the sana, 2019

## 5.2. Publication:

1. Motafeghi F, Mortazavi P, Shokrzadeh M. Anticancer activity of zinc oxide nanoparticles on prostate and colon cancer cell line. *Toxicology Research*. 2024;13(1):tfad127.
2. Shokrzadeh M, Motefaghi FS, Bagheriyan N, Shokrzadeh S. EVALUATION OF CYTOTOXIC EFFECTS OF SELECTIVE INHIBITOR ABEMACICLIB CDK4/6 ON LUNG CANCER CELL LINE (A549) AND GASTRIC CANCER CELL LINE (AGS). *Studies in Medical Sciences*. 2023;33(10):720-7.
3. Shokrzadeh M, Motafeghi F, Farhadyar N, Fathi F. Cytotoxicity Study of nHAP/Chitosan and nHAP/Cellulose Composite Scaffolds Synthesized via Co-Precipitation for Bone Tissue Engineering. *Journal of Biomimetics, Biomaterials and Biomedical Engineering*. 2023;60:1-10.
4. Motafeghi F, Shokrzadeh M, Mohammadi H, Shokrzadeh S, Razaghi H. Evaluation of Antibacterial Properties and Cytotoxicity of Ethanolic Extract of Alhagi Maurorum. *Journal of Babol University of Medical Sciences*. 2023;25(1):340-7.
5. Motafeghi F, Shahsavari R, Mortazavi P, Shokrzadeh M. Anticancer effect of paroxetine and amitriptyline on HT29 and A549 cell lines. *Toxicology in Vitro*. 2023;87:105532.
6. Motafeghi F, Shahsavari R, Mortazavi P, Babaei A, SamadiMojaveri P, Khojasteh OA, et al. Metformin and Aspirin: Anticancer effects on A549 and PC3 cancer cells and the mechanisms of action. *Toxicology Research*. 2023;12(4):702-8.
7. Motafeghi F, Mortazavi P, Zabihi J, Soroori A, Samadi Mojaveri P, Shokrzadeh M. Protective Effect of Resveratrol on Cytotoxicity, Genotoxicity, and Oxidative Stress Caused

by Cyclophosphamide and Methotrexate in Bone Marrow Stem Cell Line and Blood Lymphocytes of the Rat. *Applied In Vitro Toxicology*. 2023;9(4):129-36.

8. Motafeghi F, Mortazavi P, Shahsavari R, Shaker M, Mohammadi-Berenjestanaki H, Shokrzadeh M. Kombucha mushroom extract: anticancer, antioxidant, and antimicrobial properties. *Applied In Vitro Toxicology*. 2023;9(3):90-103.

9. Motafeghi F, Mortazavi P, Shahsavari R. Lycopene and L-Carnitine attenuate fluoxetine-induced cytotoxicity and oxidative stress in normal gingival cells: a preliminary analysis. *Studies in Medical Sciences*. 2023;34(2):80-9.

10. Motafeghi F, Mortazavi P, Salman Mahiny AH, Abtahi MM, Shokrzadeh M. The role of ginger's extract and N-acetylcysteine against docetaxel-induced oxidative stress and genetic disorder. *Drug and Chemical Toxicology*. 2023;46(4):617-24.

11. Motafeghi F, Mortazavi P, Ghassemi-Barghi N, Zahedi M, Shokrzadeh M. Dexamethasone as an anti-cancer or hepatotoxic. *Toxicology Mechanisms and Methods*. 2023;33(2):161-71.

12. Motafeghi F, Mortazavi P. Evaluation of the protective role of hydroalcoholic extract of ginger and n-acetylcysteine on genetic disorder caused by sodium azide on human blood lymphocytes by micronucleus method. *Studies in Medical Sciences*. 2023;34(1):46-57.

13. Motafeghi F, Khayambashi B, Mortazavi P, Eghbali M, Salmanmahiny A, Shahsavari R, et al. Synergistic Effect of Selenium/Zinc with Sulfasalazine on the Human Colorectal Cancer Cell Line (HT-29). *Applied In Vitro Toxicology*. 2023;9(1):3-12.

14. Motafeghi F, Habibi E, Firozjaei M, Eghbali M, Mortazavi P, Salmanmahiny A, et al. The Cytotoxic Effect of the Tarragon (*Artemisia dracunculus* L.) Hydroalcoholic Extract on the HT-29, MKN45, and MCF-7 Cell Lines. *Pharmaceutical and Biomedical Research*. 2023;9(1):27-36.

15. Motafeghi F, Gerami M, Mortazavi P, Khayambashi B, Ghassemi-Barghi N, Shokrzadeh M. Green synthesis of silver nanoparticles, graphene, and silver-graphene nanocomposite using *Melissa officinalis* ethanolic extract: Anticancer effect on MCF-7 cell line. *Iranian Journal of Basic Medical Sciences*. 2023;26(1):57.
16. Motafeghi F, Deilamian M. Investigating the Protective Effect of Resveratrol on Hepatotoxicity and Oxidative Stress Caused by 3-monochloropropan-1-2-diol in Rats. *Pharmaceutical and Biomedical Research*. 2023;9(4):311-20.
17. Modammadyan M, Motafeghi F, Eghbali M, Ebrahimzadeh MA. Antihypoxic Activities of Coenzyme Q and Folic Acid in Asphyctic, Hemic, and Circulatory Hypoxia Models in Mice. *Journal of Mazandaran University of Medical Sciences*. 2023;33(221):126-31.
18. Hoshyari N, Mesgarani A, Shokrzadeh Lamuki M, Motafeghi F, Mousavi SJ, Vaghar Mousavi M. Cytotoxicity of Two Calcium Silicate-Based Sealers and AH Plus Resin-Based Sealer for Human Gingival Fibroblasts. 2023.
19. Barani A, Motafeghi F, Eghbali M, Najjari S, Heidari M, Pourhossein M, et al. Evaluation of Antihypoxic Activities of *Heracleum Persicum* and *Boswellia Serrata* (Kundur) in Mice: Comparison of Intraperitoneal and Gavage Administrations. *Journal of Mazandaran University of Medical Sciences*. 2023;33(225):31-44.
20. Barani A, Motafeghi F, Eghbali M, Mansourian D, Mirzaalilou S, Dadollahi Sarab P, et al. Evaluation of Antihypoxic Activities of *Feijoa Sellowiana*, *Nepeta Pogonosperma* and *Cucumis Melo* in Mice. *Journal of Mazandaran University of Medical Sciences*. 2023;33(226):14-27.
21. Shokrzadeh M, Motafeghi FS, Lotfizadeh A, Ghorbani M, Haddadi Kohsar A. Cytotoxicity and mineralization activity of calcium silicate-based root canal sealers

compared to conventional resin-based sealer in human gingival fibroblast cells. *International Journal of Dentistry*. 2022;2023.

22. Shokrzadeh M, Motafeghi F, Shokrzadeh S, Pourasadollah S. Evaluation of the role of hydroalcoholic extract of ginger (*zingiber officinale* L.) and vitamin c on cell viability of normal gingival and skin cells in the presence of drabkin's solution. *Studies in Medical Sciences*. 2022;33(3):220-33.

23. Shirzadi-Ahodashti M, Mizwari ZM, Jafarkhani B, Abbastabar M, Motafeghi F, Lalerdi FS, et al. Biogenic synthesis of spherical-shaped noble metal nanoparticles using *Vicia faba* extract (X@ VF, X= Au, Ag) for photocatalytic degradation of organic hazardous dye and their in vitro antifungal, antibacterial and anticancer activities. *Inorganic Chemistry Communications*. 2022;146:110042.

24. Motafeghi F, Mortazavi P, Mahdavi M, Shokrzadeh M. Cellular effects of epsilon toxin on the cell viability and oxidative stress of normal and lung cancer cells. *Microbial pathogenesis*. 2022;169:105649.

25. Motafeghi F, Bagheri A, Seyedabadi M, Shaki F, Shokrzadeh M. Antidepressant-Like Effects of Edaravone and Minocycline: Investigation of Oxidative Stress, Neuroinflammation, Neurotrophic, and Apoptotic Pathways. *Neurotoxicity Research*. 2022;40(6):1838-58.

26. Valipour M, Naderi N, Heidarli E, Shaki F, Motafeghi F, Amiri FT, et al. Design, synthesis and biological evaluation of naphthalene-derived (arylalkyl) azoles containing heterocyclic linkers as new anticonvulsants: A comprehensive in silico, in vitro, and in vivo study. *European Journal of Pharmaceutical Sciences*. 2021;166:105974.

27. Shokrzadeh M, Mortazavi P, Moghadami A, Khayambashi B, Motafeghi F. Synergistic antiproliferative and anticancer activity of carotenoid lutein or coenzyme Q10

in combination with doxorubicin on the MCF7 cell line. *Applied In Vitro Toxicology*. 2021;7(4):167-74.

28. Shokrzadeh M, Mortazavi P, Karimi E, NasirOghli B, Shokrzadeh S, Motafeghi F. Evaluation of the role of vitamin C and melatonin on the genetic disorder of human blood lymphocytes in the presence of vincristine and permethrin. *Tabari Biomedical Student Research Journal*. 2021;3(3):21-30.

29. Shaki F, Teymoori M, Motafeghi FS, Hemmati N, Arab-Nozari M. l-Arginine ameliorated mitochondrial oxidative damage induced by sub-chronic exposure to cadmium in mice kidney. *Pharmaceutical and Biomedical Research*. 2021.

30. Motafeghi FS, Ebrahimzadeh MA, Karbalaei P, Mohammadi H. Effect of Gallic Acid on Reactivation of Acetylcholinesterase and Butyrylcholinesterase Inhibited by Diazinon in Vitro and in Vivo. *Journal of Mazandaran University of Medical Sciences*. 2020;30(189):1-13.

31. Motafeghi F, Javadi I, Allameh S. Investigation of Malachite green existence in Rainbow trout (*Oncorhynchus mykiss*) and common Carp (*Cyprinus carpio*) flesh in the area of North and South of Iran, Haraz and Shahr e Kord. 2018.

### **5.3. Patent registration**

- Developing a kit to measure the amount of reactive oxygen species (ROS) for all types of cell, tissue and clinical samples

### **5.4. Reviewer**

- ✓ Human & Experimental Toxicology (15 articles), December 2017 –August 2023
- ✓ Studies in Medical Sciences (3 articles), 2006/03/21 to 2023/08/01
- ✓ Current Research in Toxicology (2 articles), Jul 2023



## **6. Executive records (responsibilities):**

<b>No.</b>	<b>Title of responsibility</b>	<b>Organization / Institute</b>	<b>Year</b>
1			
2			

## **7- Academic Awards:**

- ✓ The top rank of the 7th educational festival of the National Ithar Award in the field of toxicology, specialized doctorate, 2022-2023
- ✓ Outstanding research student in the field of toxicology, specialized doctorate 2022-2023

## **8. Membership in scientific forums and associations:**

### **9. (Skills (mastering foreign languages, software or device, ...) (with full specifications)**

- ✓ **Laboratory animals (rats and mice) (injection-gavage-surgery)**
- ✓ **Cell culture and cell experiments**
- ✓ **RNA extraction and RealTime - PCR**
- ✓ **Extraction of plants**
- ✓ **Graph Pad Prism and Endnote software**
- ✓ **Proposal writing and scientific paper**
- ✓ **Extraction of stem cells from rats**
- ✓ **Induction of depression in rats by Maternal-Separation method**