Curriculum Vitae (CV)

1. PERSONAL DATA

NAME SURNAME: Farzaneh Fathi
EMAIL: f.fathi.arums@gmail.com, farzan_fathi2000@yahoo.com
NATIONALITY: IRANIAN
Date of the CV: 2026/20/04

2. RESEARCH FIELD

My research integrates clinical medicine, pharmacology, and medicinal chemistry to develop advanced drug delivery systems like biodegradable structures for targeted cancer therapy and plasmonic methods for medical usages.

3. EDUCATION / PROFESSIONAL EXPERIENCE

a) Education:

List your official education in chronological order (most recent first).
Use date format DD/MM/YYYY.

FROM – TO	DEGREE, FIELD	ORGANISATION
3/9/2014-11/12/2019	*PhD, Medicinal chemistry*	Tabriz University of Medical Sciences, Tabriz, Iran
23/9/2006-4/3/2009	Master, *Organic chemistry*	Tabriz University, Tabriz, Iran
23/9/2001-7/5/2006	Bachelor, *Pure chemistry*	Tabriz University, Tabriz, Iran

b) Professional Experience:

FROM – TO	POSITION HELD	ORGANISATION
10/11/2019 at present	Research assistant professor	*Pharmaceutical Sciences Research Centre, Ardabil University of Medical Sciences, Ardabil, Iran*
15/12/2019- 10/1/2021	Postdoc researcher	Tabriz University of Medical Sciences, Tabriz, Iran
10/9/2010- 8/12/2012	R&D manager	Tabriz Can Industry (TCI)

d) Language skills:

*Include your **relevant** language skills and information about official certificates (if any).*

LANGUAGE	WRITING (Native / Excellent / Good / Elemental)	SPEAKING (Native / Excellent / Good / Elemental)	READING (Native / Excellent / Good / Elemental)	CERTIFICATE AND YEAR
English	good	Good	good	IELTS, 2024
Turkish	Good	Native	Good	Mother tongue language
Persian	Native	Native	Native	National language

4. SCIENTIFIC PRODUCTION

a) Researcher ID / ORCID / Google Scholar / etc.

https://orcid.org/0000-0003-3340-6843
https://www.scopus.com/authid/detail.uri?authorId=57190049523
https://scholar.google.com/citations?user=-LjQL0sAAAAJ&hl=en
https://topresearcherslist.com/Home/Search?AuthFull=Fathi%2C+Farzaneh

b) Summary

PRODUCTION	NR
Total number of peer reviewed publications (JCR):	54
Number of peer reviewed publications as first, corresponding or last author	33
Nr of book chapters:	2
Citations	2315
i10-index	43
H-index	28

c) Publications

1. *Fathi, M., ... &* ***Fathi, F****. (2025). Preparation of Silk Fibroin Nanofibers Containing 5-Fluorouracil for pH-Sensitive Drug Delivery and Synergistic Cancer Therapy.* ***BioNanoScience****, 15(2), 1-11.*

2. *Khalid-Salako, ..* ***Fathi, F.,*** *Demirci, O. C., Öncer, N., Kurt, H., & Yüce, M. (2025). The Nanocarrier Landscape─ Evaluating Key Drug Delivery Vehicles and Their Capabilities: A Translational Perspective.* ***ACS Applied Materials & Interfaces****.*

3. *Fathi, Mehdi, et al. "Vancomycin-Loaded PVA/ZnO Nanofibers with Enhanced Antibacterial Activity and Controlled Release for Wound Healing Applications." Fibers and Polymers (2026): 1-19.*

4.*Ranjbari, Faride, and* ***Farzaneh Fathi*.*** *"Recent advances in chemistry, mechanism, and applications of quantum dots in photodynamic and photothermal therapy."* ***Anti-Cancer Agents in Medicinal Chemistry-Anti-Cancer Agents****) 24, no. 10 (2024): 733-744.*

5. *Ranjbary, F.,* ***Fathi, F.*,*** *Pakchin, P. S., & Maleki, S. (2024). Astaxanthin binding affinity to DNA: Studied by fluorescence, surface plasmon resonance and molecular docking methods.* ***Journal of Fluorescence****, 34(2), 755-764.*

6. *Johari-Ahar M, ...&* ***Fathi F.*** *Intercalation of anticancer drug mitoxantrone into DNA: Studied by spectral and surface plasmon resonance methods.* ***Journal of Molecular Structure****. 2023 Feb 15; 1274:134509.*

7. ***Fathi, F.,*** *..., & Nejati-Koshki, K. (2022). Inverse opal photonic crystals: Recent advances in fabrication methods and biological applications.* ***Journal of Drug Delivery Science and Technology****, 72, 103377.*

8. *Rashidi, M.R., ...&. and* ***Fathi, F*****., 2022. Investigation of optical images in inverse opal photonic crystal films for sensing applications; a non-destructive method.* ***Optical Materials****, 125, p.112072.*

9. *Nejati K, Rastegar M,* ***Fathi F****, Dadashpour M, Arabzadeh A. Nanoparticle-based drug delivery systems to overcome gastric cancer drug resistance.* ***Journal of Drug Delivery Science and Technology****. 2022 Apr 1; 70:103231.*

10. Fathi F, *...&, Rashidi MR. Investigation of optical and physical property in opal films prepared by colloidal and freeze-dried microspheres****. Colloids and Surfaces A: Physicochemical and Engineering Aspects****. 2021 Feb 20; 611:125842.*

11. Fathi F, *...& Rashidi MR. Detection of CD133-marked cancer stem cells by surface plasmon resonance: its application in leukemia patients.* ***Biochimica et Biophysica Acta (BBA)-General Subjects.*** *2019 Oct 1;1863(10):1575-82.*

12. Fathi F*, Rashidi MR, Omidi Y. Ultra-sensitive detection by metal nanoparticles-mediated enhanced SPR biosensors.* ***Talanta.*** *2019 Jan 15; 192:118-27.*

13.Fathi, F., *... & Rashidi, M. R. (2018). SPR signals enhancement by gold nanorods for cell surface marker detection.* ***BioImpacts:*** *BI, 9(2), 71.*

14. Fathi F, *…& Rashidi MR. Early-stage detection of VE-cadherin during endothelial differentiation of human mesenchymal stem cells using SPR biosensor.* ***Biosensors and Bioelectronics****. 2017 Oct 15; 96:358-66.*

15. *Namazi, H.,* ***F. Fathi****, and A. Heydari. "****The delivery of nanoparticles****." (2012): 149-185.*

16. *Namazi H,* ***Fathi F,*** *Dadkhah A. Hydrophobically modified starch using long-chain fatty acids for preparation of nanosized starch particles.* ***Scientia Iranica****. 2011 Jun 1;18(3):439-45.*

d) Participation in research conferences

DATE (DD/MM/YYYY)	**NAME AND PLACE OF CONFERENCE**	**TITLE AND AUTHORS** (presenting author underlined)	**TYPE** (oral/poster etc.)
28/11/2024	*International Congress on Cancer and Stem Cell Biomedicine*	Preparing inverse opal photonic crystal nanostructures	Poster
14/7/2022	*Ardabil University of Medical Sciences*	Introducing of Dynamic Light Scattering (DLS) for characterization of nanoparticles	Oral
8/7/2022	*Fourth National Conference on Innovation and Technology of Biological Sciences, Iranian Chemistry*	Photonic crystal arrays and their bio-sensing applications	Poster
1/12/2018	*The 3 rd national and international congress on stem cell and regenerative medicine*	Early-stage detection of VE-cadherin during endothelial differentiation of human mesenchymal stem cells using SPR biosensor	Poster
12/7/2018	*International meeting of RIAPA (Research Institute for Applied Physics and Astronomy)*	Biophotonics	Oral
7/5/2018	*Workshop for researchers in Iraq*	New perspectives in medical nanotechnology	Oral
13/7/2017	*The Second National Festival & International Congress on Stem Cell & Regenerative Medicine*	Endothelial Differentiation of Human Amniotic Mesenchymal Stem Cells in Vitro	Poster

e) Participation in research projects

FROM – TO (YYYY-YYYY)	**TITLE OF THE PROJECT**	**NAME OF GRANT SCHEME, FUNDING PROVIDER**	**GRANT AMOUNT IN EUR**	**YOUR ROLE IN THE PROJECT**
2022-2024	In Vitro and In Vivo Evaluation of Electrospun PVA Patch Containing Vancomycin for Wound Healing Application	Ardabil University of Medical Sciences	1000	Supervisor
2021-2023	Optimization of Diphenhydramine Buccal Patches by Semisolid Extrusion–Based Three-Dimensional (3D) Printing	Ardabil University of Medical Sciences	500	Principal investigator

2022-2023	Drug-delivery carriers based on the hydrogel silk fibroin nano-structures for controllable anti-cancer drug (5-fluorouracil) delivery.	Ardabil University of Medical Sciences	1000	Supervisor
2021-2023	Calculation of binding strength of Margatoxin peptide (extracted from scorpion venom) with human serum albumin as a drug carrier by spectral and SPR biosensor	Iran National Science Foundation & Ardabil University of Medical Sciences	2500	Principal investigator
2019-2021	Designing and developing of plasmonic and photonic crystal films	Iran National Science Foundation	2000	Principal investigator
2020-2022	Study of β-lactam-based drug interaction with albumin protein using optical, sensing, and docking methods	Ardabil University of Medical Sciences	1000	Supervisor
2021-2022	Design and fabrication of biosensors with photonic crystal arrays	Ardabil University of Medical Sciences	1000	Principal investigator
2022-2023	The study of apoptotic genes expression in MKN-45 cells treated with nano-hydrogel and anti-cancer drug (5-luorouracil)	Ardabil University of Medical Sciences	10000	Supervisor

f) Research stays and visits

FROM – TO (MM/YYYY – MM/YYYY)	**HOST INSTITUTION**	**HOST GROUP AND PI/SUPERVISOR**	**TOPIC, AND RESULTING PUBLICATIONS** (If any)
2018/1/6	2018/6/15	Hematology and Oncology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran	Detection of CD133-marked cancer stem cells by surface plasmon resonance: Its application in leukemia patients
2019/1/20	2020/1/20	Biophotonics Research Group, Research Institute for Applied Physics and Astronomy, University of Tabriz, Iran	Investigation of optical images in inverse opal photonic crystal films for sensing applications; a non-destructive method

g) Innovation activities

Currently, I am developing a professional website to provide expert consulting services focused on nanoparticle system design, synthesis and functional modification

5. FELLOWSHIPS, GRANTS, AWARDS AND HONOURS

FROM – TO (MM/YYYY – MM/YYYY)	**NAME OF THE FELLOWHIP/GRANT/AWARD/HONOUR**	**SHORT DESCRIPTION**	**STATUS** (ongoing/ finalised/pending)
2023 and 2025	Listed in "World's Top 2% Scientists" based on Stanford and Elsevier data	World's Top 2% Scientists	Finalised
2024/10	Grant for young researcher	NIMAD grant National Institute for Medical Research Development	Pending

2018/8	Award for the best article in "The 3 rd national and international congress on stem cell and regenerative medicine	The best article award	Finalised

b) Membership of Professional Bodies

-Indexing Manager of Journal of Ardabil University of Medical Science (JARUMS) in Scopus.
-Presentation a lecture on "Biosensors for Covid 19 Detection: From Research to Development, Ardabil University of Medical Sciences, 2020"
-Reviewer of more than 20 of Elsevier journals.
-Member of the Research Council of the Pharmaceutical Sciences Research Center in Ardabil University of Medical Sciences.

6. TEACHING AND SUPERVISION ACTIVITIES

- ✓ During my time at Ardabil University of Medical Sciences, I provided academic supervision **to more than 10 medical and pharmacy students** in the Faculty of Medicine and Pharmacy.
- ✓ Workshop teacher of *"How to write an ISI paper in medical sciences, Ardabil University of Medical Sciences, Iran 2024"*
- ✓ Workshop teacher on *"Introducing of Dynamic Light Scattering (DLS) for characterization of nanoparticles, Ardabil University of Medical Sciences, 2022"*
- ✓ Workshop teacher on *"development of microporous inverse opal structure, Ardabil University of Medical Sciences, 2022."*
- ✓ Workshop teacher of *"Surface plasmon resonance applications in Nano-medicine, Tabriz University of Medical Sciences, Iran 2018"*

7. SCIENTIFIC COMMUNICATION ACTIVITIES

- ✓ R@D researcher in a spin-out company to develop an antibacterial coating for a finger-carrying container.
- ✓ Operator and technical authority for Labscale Electrospinning Machine in Ardabil University of Medical Science.
- ✓ Indexing manager of Journal of Ardabil University of Medical Science (JARUMS) in Scopus.
- ✓ Operator and technical authority for surface plasmon resonance (bionavis) instrument in core lab of Tabriz University of Medical Sciences.
- ✓ Operator and technical authority for BioTek Cytation 5 Cell Imaging Multimode Reader devices in core lab of Tabriz University of Medical Sciences.

8. ADDITIONAL SKILLS AND TRAINING

Considerable experience in:
-Preparation of polymeric substrate, Synthesis of nanoparticles-based biopolymers, & Surface modification
-Development of plasmonic materials and approaches
- Fabrication of nanofibrous structure
-Drug delivery investigations using dialysis method
-Spectral based methods FTIR, UV, Fluorescence, Localized surface plasmon resonance (SPR)
-Cell surface marker detection using optic based biosensors
-Investigation of interaction small molecules
-Synthesize of plasmonic nanoparticles (spherical, rods)
-Modification of biopolymers (chitosan, starch)
-Cellular and in vitro assays including MTT, PCR, Flow cytometry, ELISA, & Immunoflorescent assay
-Handling of animal models & in vivo evaluations for wound healing application
-Bioinformatics including: Molecular Docking.