١. PERSONAL DATA

Name: Mahsa Akbari

Birth data: ١٤. August. ١٩٩١, Zanjan, Iran

Highest Academic Degree: PhD

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٢. EDUCATION

٢٠١٨-٢٠٢٥ **Doctorate of Philosophy in Pharmaceutical Nanotechnology**

Faculty of Pharmacy, University of Zanjan University of Medical Sciences, Zanjan, Iran.

Supervisors: Dr. Mohammad-Ali Shahbazi

Dissertation: Fabrication of dissolvable polymeric microneedle containing metal nanoparticles to kill skin cancer using photothermal therapy

٢٠١٤-٢٠١٦ **Master Degree in Analytical Chemistry**

Faculty of Science, Department of Chemistry, Zanjan University, Zanjan, Iran.

Supervisors: Prof. Mohammad-Reza Yaftiyan, Dr. Hassan Shayani-Jam

Dissertation: Electrochemical oxidation of acetaminophen in the presence of diclofenac and piroxicam - Synthesis of new derivatives and kinetic investigation of toxic quinone imine/drugs interactions.

٢٠٠٩-٢٠١٤ **Bachelor Degree in Applied Chemistry**

Faculty of Science, Department of Chemistry, Zanjan University, Zanjan, Iran.

PUBLICATIONS CONTAINING ORIGINAL DATA

١. Akbari M, Shayani-Jam H, Yaftian MR, Parinejad M. Electrochemical oxidation of acetaminophen in the presence of diclofenac and piroxicam - Synthesis of new derivatives and kinetic investigation of toxic quinone imine/drugs interactions. Journal of Electroanalytical Chemistry. 2018;827:160-6. (Impact Factor:4.464)

٢. Aziz Maleki, Matineh Ghomi, Nasser Nikfarjam, Mahsa Akbari, Esmaeel Sharifi, Mohammad-Ali Shahbazi, Mehraneh Kermanian, Mohammed Seyedhamzeh, Ehsan Nazarzadeh Zare, Mehdi Mehrali, Omid Moradi, Farshid Sefat, Virgilio Mattoli, Pooyan Makvandi, Yu Chen. Biomedical Applications of MXene-Integrated Composites: Regenerative Medicine, Infection Therapy, Cancer Treatment, and Biosensing. Advanced Functional Materials. 2022;32:٢٢٠٣٤٣٠. (Impact Factor:18.808)

٣. Reyhane Masoudifar, Niki Pouyanfar, Dongfei Liu, Mahnaz Ahmadi, Behnaz Landi, Mahsa Akbari, Sina Moayeri-Jolandan, Fatemeh Ghorbani-Bidkorpeh, Elham Asadian, Mohammad-Ali Shahbazi. Surface engineered metal-organic frameworks as active targeting nanomedicines for mono- and multi-therapy. Applied Materials Today. 2022; 29, 101646. (Impact Factor: 10.041)

٤. Mahsa Sedighi; Zahra Mahmoudi; Alireza Ghasempour; Mehdi Shakibaie; Fahimeh Ghasemi; Mahsa Akbari; Ebrahim Mostafavi; Mohammad-Ali Shahbazi. Nanostructured multifunctional glycopolypeptide-based copolymers for biomedical applications. Journal of Controlled Release. 2022; 354, 128-145. (Impact Factor:11.47)

٥. Zeinab Pourmansouri, Atefeh Malekkhatabi, Maryam Toolabi, Mahsa Akbari, Mohammad Ali Shahbazi, Ali Rostami. Anti-nociceptive effect of sufentanil polymeric dissolving microneedle on male mice by hot plate technique. Iranian biomedical journal. 2023; 28 (4), 192. (Impact Factor: 1.09)

٦. Mina Mohammadi, Samin Abbaszadeh, Vahideh Nosrati-Siahmazgi, Mahsa Akbari, Saman Rezaei, Kiyan Musaie, Mohammad Reza Eskandari, Hélder A Santos, Narges Poursina, Mohammad-Ali Shahbazi. Diatom-guided bone healing via a hybrid natural scaffold. Heliyon. 2024; 10 (4). (Impact Factor: 3.6)

٧. Mahsa Akbari, Maryam Toolabi, Atefeh Malek-Khatabi, Mohammad Reza Eskandari, Bo Zhi Chen, Xin Dong Guo, Mohammad-Ali Shahbazi. Localized photothermal–chemotherapy synergy via Bi 2 S 3 and sorafenib co-loaded dissolvable microneedles: a non-invasive precision delivery approach for melanoma suppression. Materials Advances. 2025. (Impact Factor: 4.7)

٨. Maryam Toolabi, Mahsa Akbari, Narges Forouzideh, Yuewen Zhu, Mohammad Reza Eskandari, Hélder A Santos, Mohammad-Ali Shahbazi. A microneedle with a photoactive electrospun backing layer enables multitherapy and combined drug delivery to the skin wound. Materials Advances. ٢٠٢٦. (Impact Factor: 4.7)

Conference Presentations

١. Mahsa Akbari, Mohammad-Reza Yaftiyan, Hassan Shayani-Jam, electrochemical oxidation of acetaminophen in the presence of diclofenac, 11th Annual Electrochemistry Seminar of Iran, 18-19 Nov. 2015, Tarbiat modares university.

٢. Mahsa Akbari, 8th International e-congress on Nanoscience & Nanotechnology, 1-18 Feb. 2021, Mashhad university of medical sciences.

٣. Mahsa Akbari, Atefe Malek-Khatabi, Maryam Toolabi, Zeinab Poormansoori, Fabrication of a dissolvable photothermal polymeric microneedle containing bismuth nanoparticles for cancer therapy, 3rd Middle East Controlled Release Conference and the 8th Iranian Controlled Release Conference, 9-11 May 2022, Tehran university of medical sciences.

٤. Mahsa akbari, Zeinab pourmansouri, Maryam toolabi, Mohammad-Reza eskandari, Mohammad-Ali shahbazi, A dissolvable polymeric microneedle containing bismuth nanoparticles for combination therapy of melanoma, 4th International Nanomedicine & Nanosafety Conference, 10-11 May. 2023, Shiraz university of medical sciences.