

Ahmad Vaez Curriculum Vitae

Personal information:

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Educations:

2014-2018: Doctor of philosophy (PhD), Department of Tissue Engineering and Applied Cell Sciences, The School of Advanced Technologies in Medicine (SATiM), Tehran University of Medical Sciences (TUMS), Tehran, Iran.

2010-2014: Master of Science (MSc), Anatomical sciences Department, school of medicine, Isfahan University of medical sciences, Isfahan, Iran.

2002-2006: Bachelor of Science (BSc), school of Nursing and Midwifery, Isfahan University of medical sciences, Isfahan, Iran.

Research interests:

Tissue engineering

Regenerative medicine

Microfluidics

Position:

Department of Tissue Engineering and Applied Cell Sciences, School of Advanced Medical Sciences and Technologies, Shiraz University of Medical Sciences, Shiraz, Iran.

Publications:

Articles:

1. Mahdi Naseri-Nosar, Saeed Farzamfar, Hamed Sahrapeyma, Sadegh Ghorbani, Farshid Bastami, **Ahmad Vaez***, Majid Salehi*. Cerium oxide nanoparticle-containing poly (ϵ -caprolactone)/gelatin electrospun film as a potential wound dressing material: in vitro and in vivo evaluation. *Materials Science and Engineering: C*. 2017; 81: 366-372.
2. Mohammad Mardani, **Ahmad Vaez**, Shahnaz Razavi. Effect of saffron on rat sperm chromatin integrity. *Iranian journal of reproductive medicine*. 2014;12(5): 343–350.
3. Saeed Farzamfar, Mahdi Naseri-Nosar, Hadi Samadian, Simin Mahakizadeh, Roksana Tajerian, Majid Rahmati, **Ahmad Vaez**, Majid Salehi. Taurine-loaded poly (ϵ -caprolactone)/gelatin electrospun mat as a potential wound dressing material: In vitro and in vivo evaluation. *Journal of Bioactive and Compatible Polymers*. 2018; 33(3): 282-294.
4. Hadi Samadian, Majid Salehi, Saeed Farzamfar, **Ahmad Vaez**, Arian Ehterami, Hamed Sahrapeyma, Arash Goodarzi, Sadegh Ghorbani. In vitro and in vivo evaluation of electrospun cellulose acetate/ gelatin/ hydroxyapatite nanocomposite mats for wound dressing applications. *Artificial cells, nanomedicine, and biotechnology*. 2018; 1-11.
5. Majid Salehi, Mahdi Naseri-Nosar, Somayeh Ebrahimi-Barough, Mohammdreza Nourani, **Ahmad Vaez**, Saeed Farzamfar, Jafar Ai. Regeneration of sciatic nerve crush injury by a hydroxyapatite nanoparticle-containing collagen type I hydrogel. *The Journal of Physiological Sciences*. 2018; 68(5): 579-587.
6. Mahdi Naseri-Nosar, Saeed Farzamfar, Majid Salehi, **Ahmad Vaez**, Roksana Tajerian, Mahmoud Azami. Erythropoietin/aloe vera-releasing wet-electrospun polyvinyl alcohol/chitosan sponge-like wound dressing: In vitro and in vivo studies. *Journal of Bioactive and Compatible Polymers*. 2018; 33(3): 269-281.
7. Saeed Farzamfar, Mahdi Naseri-Nosar, **Ahmad Vaez**, Farshid Esmailpour, Arian Ehterami, Hamed Sahrapeyma, Hadi Samadian, Amir-Ali Hamidieh, Sadegh Ghorbani, Arash Goodarzi, Arian Azimi, Majid Salehi. Neural tissue

regeneration by a gabapentin-loaded cellulose acetate/gelatin wet-electrospun scaffold. *Cellulose*. 2018; 25(2): 1229-1238.

8. Majid Salehi, **Ahmad Vaez**, Mahdi Naseri-Nosar, Saeed Farzamfar, Arman Ai, Jafar Ai, Shima Tavakol, Mehrdad Khakbiz, Somayeh Ebrahimi-Barough. Naringin-loaded Poly (ϵ -caprolactone)/Gelatin Electrospun Mat as a Potential Wound Dressing: In vitro and In vivo Evaluation. *Fibers and Polymers*. 2018; 19(1): 125-134.
9. Saeed Farzamfar, Mahdi Naseri-Nosar, Hamed Sahrapeyma, Arian Ehterami, Arash Goodarzi, Majid Rahmati, Gholamreza Ahmadi Lakalayeh, Sadegh Ghorbani, **Ahmad Vaez**, Majid Salehi. Tetracycline hydrochloride-containing poly (ϵ -caprolactone)/poly lactic acid scaffold for bone tissue engineering application: in vitro and in vivo study. *International Journal of Polymeric Materials and Polymeric Biomaterials*. 2018; 1-8.
10. Arian Ehterami, Majid Salehi, Saeed Farzamfar, **Ahmad Vaez**, Hadi Samadian, Hamed Sahrapeyma, Mehdi Mirzaii, Sadegh Ghorbani, Arash Goodarzi. In vitro and in vivo study of PCL/collagen wound dressing loaded with insulin-chitosan nanoparticles on cutaneous wound healing in rats model. *International journal of biological macromolecules*. 2018; 117: 601-609.
11. **Seyed Ahmad Vaez**, Somayeh Ebrahimi-Barough, Masoud Soleimani, Sedighe Kolivand, Saeed Farzamfar, Seyed Hossein Ahmadi Tafti, Mahmoud Azami, Farshid Noorbakhsh, Jafar Ai. The cardiac niche role in cardiomyocyte differentiation of rat bone marrow-derived stromal cells: comparison between static and microfluidic cell culture methods. *EXCLI journal*. 2018; 17: 762.
12. Saeed Farzamfar, Mahdi Naseri-Nosar, Alireza Ghanavatinejad, **Ahmad Vaez**, Amir Hassan Zarnani, Majid Salehi. Sciatic nerve regeneration by transplantation of menstrual blood-derived stem cells. *Molecular biology reports*. 2017; 44(5): 407-412.
13. Saeed Farzamfar, Farshid Esmailpour, Majid Rahmati, **Ahmad Vaez**, Mehdi Mirzaii, Behzad Garmabi, Asghar Shayannia, Elham Ebrahimi, Hamid Vahedi, Majid Salehi. Poly-lactic Acid/Gelatin Nanofiber (PLA/GTNF) Conduits Containing Platelet-Rich Plasma for Peripheral Nerve Regeneration. *International Journal of Health Studies*. 2017; 3(2).

14. Saeed Farzamfar, Majid Salehi, Arian Ehterami, Mahdi Naseri-Nosar, **Ahmad Vaez**, Amir Hassan Zarnani, Hamed Sahrapeyma, Mohammad-Reza Shokri, Mehdi Aleahmad. Promotion of excisional wound repair by a menstrual blood-derived stem cell-seeded decellularized human amniotic membrane. *Biomedical Engineering Letters*. 2018; 1-6.
15. Hahnaz Razavi, **Sayed Ahmad Vaez**, Mohammad Mardani. Optimizing Acridine orange staining for assessment of protective effects of saffron and vitamin E on rat sperm DNA structure. *Journal of Isfahan Medical School (IUMS)*. 2014; 32 (293), 1-12.
16. Nazem Ghasemi, Gholam-Reza Dashti, Fatimah Amoozgar, **Seyed Ahmad Vaez**. Effect of Cholesterol, Iron and Vitamin E on Protamine Deficiency and DNA Fragmentation of Male Rabbit Sperm. *Journal of Isfahan Medical School*. 2014; 31 (259).
17. Saeed Farzamfar, Arian Ehterami, Majid Salehi, **Ahmad Vaez**, Amir Atashi, Hamed Sahrapeyma. Unrestricted Somatic Stem Cells Loaded in Nanofibrous Conduit as Potential Candidate for Sciatic Nerve Regeneration. *Journal of Molecular Neuroscience*. 2018; 1-14.
18. Saeed Farzamfar, Akram Hasanpour, Niloufar Nazeri, Hengameh Razavi, Majid Salehi, Shilan Shafei, Vajiheh T Nooshabadi, **Ahmad Vaez**, Arian Ehterami, Hamed Sahrapeyma, Jafar Ai. Extracellular micro/nanovesicles rescue kidney from ischemia-reperfusion injury. *Journal of cellular physiology*. 2019.
19. Ehterami, A., M. Salehi, S. Farzamfar, H. Samadian, **A. Vaez**, S. Ghorbani, J. Ai, and H. Sahrapeyma. Chitosan/alginate hydrogels containing Alpha-tocopherol for wound healing in rat model. *Journal of Drug Delivery Science and Technology*, 2019; **51**: p. 204-213.
20. Samadian, H., **A. Vaez**, A. Ehterami, M. Salehi, S. Farzamfar, H. Sahrapeyma, and P. Norouzi, Sciatic nerve regeneration by using collagen type I hydrogel containing naringin. *Journal of Materials Science: Materials in Medicine*, 2019; 30(9): p. 107.
21. Arabpour, Z., A. Baradaran-Rafii, N. Lotfi Bakhshaiesh, J. Ai, S. Ebrahimi-Barough, H. Esmaeili Malekabadi, N. Nazeri, **A. vaez**, M. Salehi, and F. Sefat. Design and Characterization of Biodegradable Multi Layered Electrospun Nanofibers for Corneal Tissue Engineering Applications. *Journal of Biomedical Materials Research Part A*, 2019.
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- Cells for Sciatic Nerve Regeneration in the Rat Model. *Fibers and Polymers*, 2019; 20(3): p. 490-500.
23. Majid Salehi, Maryam Niyakan, Arian Ehterami, Saeed Haghi-Daredeh, Simin Nazarnezhad, Ghasem Abbaszadeh-Goudarzi, **Ahmad Vaez** et al. Porous electrospun poly (ϵ -caprolactone)/gelatin nanofibrous mat containing cinnamon for wound healing application: in vitro and in vivo study. *Biomedical engineering letters*, 2020; 10 (1): 149-161.
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and characterize the development of an innovative nanocomposite to investigate its antimicrobial properties. *Applied Physics A. Appl. Phys. A* 2022;128, 250.

32. Amir Hossein Meisami, Milad Abbasi, Sareh Mosleh-Shirazi, Arezo Azari, Ali Mohammad Amani, **Ahmad Vaez**, Ali Golchin. Self-propelled micro/nanobots: A new insight into precisely targeting cancerous cells through intelligent and deep cancer penetration. *European journal of pharmacology*. 2022; 175011.
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34. Ali Mohammad Amani, Peyman Danaie, **Ahmad Vaez**, Razieh Gholizadeh, Tahereh Firuzyar, Fatemehsadat Dehghani, Sareh Mosleh-Shirazi. Rutin precursor for the synthesis of superparamagnetic ZnFe₂O₄ nanoparticles: experimental and density functional theory. *Applied Physics A*. 2022; 128.8, 1-10.
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36. **Ahmad Vaez**, Milad Abbasi, Leili Shabani, Esmat Azizipour, Mostafa Shafiee, Mohammad Ali Zare, Omid Rahbar, Arezo Azari, Ali Mohammad Amani, Ali Golchin. A bright horizon of intelligent targeted-cancer therapy: nanoparticles against breast cancer stem cells. *Current Stem Cell Research & Therapy*. 2022.
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- Rutin-templated mesoporous silica nanoparticles decorated with nanosilver. *Scientific reports*. 13.1 (2023): 5987.
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activity of Fe₃O₄@ SiO₂/Schiff-base/Cu (II) magnetic nanoparticles against pathogenic Candida species. *Scientific reports*. 2024 Mar 11;14(1):5855.

Books:

1. Beheshtizadeh N, **Vaez A**, Siminzar P, Azami M, Farzin A. Encapsulation: Shell and core. *InPrinciples of Biomaterials Encapsulation* 2023 Jan 1 (pp. 115-148). Woodhead Publishing.
2. Farzin A, Beheshtizadeh N, **Vaez A**, Siminzar P, Varzandeh M, Azami M. Encapsulation: Controlled drug delivery. *InPrinciples of Biomaterials Encapsulation* 2023 Jan 1 (pp. 149-200). Woodhead Publishing.
3. **Vaez A**, Amani AM, Salehi M, Zarei-Behjani Z, Rezvani A, Dourtaj H, Hooshmand-Ardakani A, Arabpour Z. Different administration routes for nanovectors in cancer immunotherapy. *InNanomedicine in Cancer Immunotherapy* 2024 Jan 1 (pp. 71-110). Academic Press.