

Curriculum Vitae

Personal information

Family name: Samadian
First name: Hadi
Date of birth: 1 October 1984, Hamadan, Iran
Marital Status: Married,
Highest Academic Degree: Doctor of Philosophy (PhD)

Contact information

- **Address (University):** Department of Molecular Medicine, School of Medicine, Hamedan University of Medical Sciences, Hamedan, Iran

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Main Research Interest

Nanomedicine, Nanoparticulate, Nanofibers, Tissue engineering, 3D scaffolds, wound healing/dressing materials, Targeted Drug Delivery, Targeted cancer therapy, Surface Biofunctionalization of Nanomaterials,

Education

- **2012-2018:** PhD of Medical Nanotechnology, Tehran University of Medical Sciences (TUMS), Tehran, Iran.
PhD. Thesis Title: "Fabrication of mineralized conductive carbon nanofiber composite as a substrate for culture and electrical stimulation of osteoblast cells "
- **2010-1012:** MSc of Medical Nanotechnology, Tehran University of Medical Sciences (TUMS), Tehran, Iran.
M.Sc. Thesis Title: "Study of thermal effects of folic acid conjugated Gold Nanorods in presences of radiofrequency waves on KB cell line"
- **2005-2009:** BSc of Clinical Laboratory Sciences, Hamadan University of Medical Sciences (UMSHA), Hamadan, Iran.

PUBLICATION RECORD:

Total Publications: 105	h-Index	Number of Citations	Source of Citation Data
	44	5,192	Scopus
	48	6224	Google Scholar

I have published in **Nano Today (IF: 20.722)**, **Coordination Chemistry Reviews (IF: 24.315)**, **Drug Discovery Today (IF: 7.851)**, **ACS applied materials & interfaces (IF: 9.229)**, **Journal of Controlled Release (IF: 9.76)**, **Mutation Research/Reviews in Mutation Research (IF: 5.8)**, and **Carbohydrate Polymers (IF: 9.38)**

RESEARCH PAPERS

1. Radiolabeled carbon-based nanostructures: New radiopharmaceuticals for cancer therapy?, Mehdi Jaymand, Yasamin Davatgaran Taghipour, Aram Rezaei, Hossein Derakhshankhah, Mohammad Foad Abazari, **Hadi Samadian***, Michael R. Hamblin, **Coordination Chemistry Reviews, 440**, 213974, 2021
2. Folate receptor-targeted nanoprobe for molecular imaging of cancer: Friend or foe?, Ali Shakeri-Zadeha, Abolhasan Rezaeyan, Abolfazl Sarikhani, Hamed Ghaffari, **Hadi Samadian**, Sara Khademi, Habib Ghaznavih, Jeff W.M. Bulte, **Nano Today**, 39, 101173, 2021
3. Natural polymers-based light-induced hydrogels: Promising biomaterials for biomedical applications, **Hadi Samadian**, Hassan Maleki, Zahra Allahyari, Mehdi Jaymand, **Coordination Chemistry Reviews** 420, 213432, 2020
4. Synthesis, surface modifications, and biomedical applications of carbon nanofibers: Electrospun vs vapor-grown carbon nanofibers. Samaneh Keshavarz, Oseweuba Valentine Okoro, Masoud Hamidi, Hossein Derakhshankhah, Mehdi Azizi, Seyed Mohammad Nabavi, Shayan Gholizadeh, Seyed Mohammad Amini, Amin Shavandi, Rafael Luque, **Hadi Samadian***. **Coordination Chemistry Reviews**, Volume 472, 1 December 2022, 214770
5. Exopolysaccharide from the yeast *Papiliotrema terrestris* PT22AV for skin wound healing, Masoud Hamidi, Oseweuba Valentine Okoro, Giuseppe Ianiri, Hafez Jafari, Khodabakhsh Rashidi, Saeed Ghasemi, Raffaello Castoria, Davide Palmieri, Cédric Delattre, Guillaume Pierre, Mahta Mirzaei, Lei Nie, **Hadi Samadian***, Amin Shavandi. **Journal of Advanced Research**. Available online 25 June 2022
6. Recent advances in ultrasound-triggered drug delivery through lipid-based nanomaterials, Amirhossein Ahmadi, Samira Hosseini-Nami, Ziaeddin Abed, Jaber Beik, Liliana Aranda-Lara, **Hadi Samadian***, Enrique Morales-Avila, Mehdi Jaymand, Ali Shakeri-Zadeh. **Drug Discovery Today**, 25, 12, 2182-2200, 2020

7. Gold nanoparticle-mediated bubbles in cancer nanotechnology, Ali Shakeri-Zadeha, Hajar Zareyi, Roghayeh Sheervalilou, Sophie Laurent, Habib Ghaznavi, **HadiSamadian***, **Journal of Controlled Release**, 2020
8. Fabrication and Characterization of Nanocomposite Hydrogel Based on Alginate/Nano-Hydroxyapatite Loaded with Linum usitatissimum Extract as a Bone Tissue Engineering Scaffold. Mahnaz Mohammadpour, **Hadi Samadian***, Nader Moradi, Zhila Izadi, Mahdiah Eftekhari, Masoud Hamidi, Amin Shavandi, Anthony Quéro, Emmanuel Petit, Cédric Delattre, Redouan Elboutachfai. **Mar. Drugs** 2022, 20(1), 20; <https://doi.org/10.3390/md20010020>
9. Electroactive nanofibrous scaffold based on polythiophene for bone tissue engineering application. omayeh Vandghanooni, **Hadi Samadian**, Sattar Akbari-Nakhjavani, Balal Khalilzadeh, Morteza Eskandani, Bakhshali Massoumi & Mehdi Jaymand. **Journal of Materials Research** (2022).
10. Amphiphilic Carbon Quantum Dots as a Bridge to a Pseudohomogeneous Catalyst for Selective Oxidative Cracking of Alkenes to Aldehydes: A Nonmetallic Oxidation System, Leila Hadian-Dehkordi, Aram Rezaei, Ali Ramazani, Mehdi Jaymand, **Hadi Samadian**, Lingxia Zheng, Xiaolei Deng, Huajun Zheng, **ACS Applied Materials & Interfaces**, 2020
11. Genotoxicity assessment of carbon-based nanomaterials; Have their unique physicochemical properties made them double-edged swords?, **Hadi Samadian**, Mohammad Saeid Salami, Mehdi Jaymand, Asaad Azarnezhad, Masoud Najafi, Hamed Barabadi, Amirhossein Ahmadi, **Mutation Research/Reviews in Mutation Research** 783, 108296, 2020
12. Electrospun cellulose acetate/gelatin nanofibrous wound dressing containing berberine for diabetic foot ulcer healing: in vitro and in vivo studies, **Hadi Samadian**, Sina Zamiri, Arian Ehterami, Saeed Farzamfar, Ahmad Vaez, Hossein Khastar, Mostafa Alam, Armin Ai, Hossein Derakhshankhah, Zahra Allahyari, Arash Goodarzi, Majid Salehi, **Scientific Reports** 8312, 2020
13. Cell loaded hydrogel containing Ag-doped bioactive glass–ceramic nanoparticles as skin substitute: Antibacterial properties, immune response, and scarless cutaneous wound regeneration. Esmaeel Sharifi, Seyede Athar Sadati, Satar Yousefiasl, Rossella Sartorius, Mahdi Zafari, Leila Rezakhani, Morteza Alizadeh, Ehsan Nazarzadeh Zare, Shadi Omidghaemi, Fatemeh Ghanavatinejad, Mohammad-Saeid Jami, Erfan Salahinejad, **Hadi Samadian**, Ana Cláudia Paiva-Santos, Piergiuseppe De Berardinis, Abbas Shafiee, Franklin R.Tay, Samiramis Pourmotabed, Pooyan Makvandi. **Bioengineering & Translational Medicine**. 2022;e10386.
14. A tailored polylactic acid/polycaprolactone biodegradable and bioactive 3D porous scaffold containing gelatin nanofibers and Taurine for bone regeneration, **Hadi Samadian**, Saeed Farzamfar, Ahmad Vaez, Arian Ehterami, Arindam Bit, Mostafa Alam, Arash Goodarzi, Gholamhossein Darya, Majid Salehi, **Scientific Reports** 13366, 2020

15. Osteoconductive and electroactive carbon nanofibers/hydroxyapatite nanocomposite tailored for bone tissue engineering: *in vitro* and *in vivo* studies, **Hadi Samadian**, Hamid Mobasheri, Mahmoud Azami, Reza Faridi-Majidi, , *Scientific Reports* 14853, 2020
16. Sophisticated polycaprolactone/gelatin nanofibrous nerve guided conduit containing platelet-rich plasma and citicoline for peripheral nerve regeneration: In vitro and in vivo study, **Hadi Samadian**, Arian Ehterami, Arash Sarrafzadeh, Hossein Khastar, Mohammad Nikbakht, Aram Rezaei, Leila Chegini, Majid Salehi, *International journal of biological macromolecules* 150, 380-388, 2020
17. Co-electrospun nanofibrous mats loaded with bitter melon (Momordica charantia) extract as the wound dressing materials: in vitro and in vivo. Mohammad Saeid Salami, Gholamreza Bahrami, Elham Arkan, Zhila Izadi, Shahram Miraghaee and **Hadi Samadian**. *BMC Complementary Medicine and Therapies* (2021) 21:111
18. Biologically modified electrospun polycaprolactone nanofibrous scaffold promotes osteogenic differentiation, Mohammad FoadAbazaria, Sepehr Torabinejad, Shohreh Zare Karizi, **Hadi Samadian**, Sahar Jalili ghelichi, Mehdi Norouzi, Hassan Askarig, Vahdat Poortahmasebi, Seyedeh Elnaz Enderami, Fatemeh Soleimanifar. *Journal of Drug Delivery Science and Technolog.* 2022, 103050
19. Electro-conductive carbon nanofibers containing ferrous sulfate for bone tissue engineering, Houra Nekounam, Hadi Samadian, Shahin Bonakdar, Fatemeh Asghari, Mohammad Ali Shokrgozar, Reza FaridiMajidi, *Life Sciences*, 2021, 119602
20. Microfibers nanocomposite based on polyacrylonitrile fibers/bismuth oxide nanoparticles as X-ray shielding material. Mehdi Rashidi, Aram Rezaei, Salar Bijari, Mehdi Jaymand, **Hadi Samadian**, Elham Arkan, Saleh Salehi Zahabi, Mehdi Hosseini. *J Appl Polym Sci.* 2021;138:e50755
21. Mesoporous silica coated gold nanorods: a multifunctional theranostic platform for radiotherapy and X-ray imaging. Fereshteh Koosha, Zohreh Jomeh Farsangi, **Hadi Samadian** & Seyed Mohammad Amini. *Journal of Porous Materials.* 2021
22. Bioengineered 3D nanocomposite based on gold nanoparticles and gelatin nanofibers for bone regeneration: in vitro and in vivo study. **Hadi Samadian** ,Hossein Khastar ,Arian Ehterami & Majid Salehi. *Scientific Reports.* 2021, 13877
23. A bio-inspired gelatin-based pH- and thermal-sensitive magnetic hydrogel for in vitro chemo/hyperthermia treatment of breast cancer cells. Hossein Derakhshankhah, Rana Jahanban-Esfahlan, Somayeh Vandghanooni, Sattar Akbari-Nakhjavani, Bakhshali Massoumi, Babak Haghshenas, Aram Rezaei, Amir Farnudiyan-Habibi, **Hadi Samadian**, Mehdi Jaymand. *J Appl Polym Sci.* 2021
24. Tarkhineh as a new microencapsulation matrix improves the quality and sensory characteristics of probiotic Lactococcus lactis KUMS-T18 enriched potato chips. Amir Kiani, Yousef Nami, Shahab Hedayati, Mehdi Jaymand, **Hadi Samadian** & Babak Haghshenas. *Scientific Reports.* 2021, 11:12599

25. Silica nanoparticles-incorporated carbon nanofibers as bioactive biomaterial for bone tissue engineering. Houra Nekounam, Mohammad Reza Kandi, Donya Shaterabad, **Hadi Samadian**, Narges Mahmoodi, Elham Hasanzadeh, Reza Faridi-Majidi. **Diamond & Related Materials**. 2021, 108320
26. Chitosan hydrogel loaded with Aloe vera gel and tetrasodium ethylenediaminetetraacetic acid (EDTA) as the wound healing material: *in vitro* and *in vivo* study. Majid Salehi, Sina Zamiri, **Hadi Samadian**, Jafar Ai, Laleh Foroutani, Arman Ai, Mehdi Khanmohammadi. **J Appl Polym Sci**. 2021
27. ,Multi-stimuli-responsive magnetic hydrogel based on Tragacanth gum as a de novo nanosystem for targeted chemo/hyperthermia treatment of cancer. Rana Jahanban-Esfahlan, Khadijeh Soleimani ,Hossein Derakhshankhah ,Babak Haghshenas ,Aram Rezaei ,Bakhshali Massoumi ,Amir Farnudiyan-Habibi ,**Hadi Samadian** & Mehdi Jaymand **Journal of Materials Research**, 2021858–869.
28. Pseudohomogeneous metallic catalyst based on tungstate-decorated amphiphilic carbon quantum dots for selective oxidative scission of alkenes to aldehyde. Aram Rezaei, Leila Hadian-Dehkordi, Hadi Samadian, Mehdi Jaymand, Homa Targhan, Ali Ramazani, Hadi Adibi, Xiaolei Deng, Lingxia Zheng & Huajun Zheng. **Scientific Reports**. 2021
29. Plasmonic hyperthermia or radiofrequency electric field hyperthermia of cancerous cells through green-synthesized curcumin-coated gold nanoparticles. Abbas Rezaeian, Seyed Mohammad Amini, Mohammad Reza. Najafabadi, Zohreh Jomeh Farsangi & **Hadi Samadian**. **Lasers in Medical Science**, 2021
30. Electrically Conductive Nanofibers Composed of Chitosan-grafted Polythiophene and Poly (ϵ -caprolactone) as Tissue Engineering Scaffold. Bakhshali Massoumi, Mojtaba Abbasian, Balal Khalilzadeh, Rana Jahanban-Esfahlan, Hadi Samadian, Hossein Derakhshankhah, and Mehdi Jaymand. *Fibers and Polymers*. 2021
31. Naturally occurring biological macromolecules-based hydrogels: Potential biomaterials for peripheral nerve regeneration, **Hadi Samadian**, Hassan Maleki, Anwar Fathollahi, Majid Salehi, Shayan Gholizadeh, Hossein Derakhshankhah, Zahra Allahyari, Mehdi Jaymand, **International Journal of Biological Macromolecules**, Volume 154, 2020
32. Stimuli-responsive natural gums-based drug delivery systems for cancer treatment, Khadijeh Soleimani, Hossein Derakhshankhah, Mehdi Jaymand, **Hadi Samadian**, **Carbohydrate Polymers**, 254, 15, 117422, 2021
33. Peripheral nerve regeneration in rats by chitosan/alginate hydrogel composited with Berberine and Naringin nanoparticles: *in vitro* and *in vivo* study, Mohammad Hossein Ebrahimi, **Hadi Samadian**, Shiva Tavako, Davanid Nariman Rezae Kolarijani, Nasser Mogharabian, Mohammad Saeid Salami, Majid Salehi, **Journal of Molecular Liquids**, 114226, 2020
34. Toxicological profile of lipid-based nanostructures: are they considered as completely safe nanocarriers?, Asaad Azarnezhad, **Hadi Samadian**, Mehdi Jaymand, Mahsa Sobhani, Amirhossein Ahmadi, **Critical reviews in toxicology** 50 (2), 148-176, 2020

35. Electro-conductive carbon nanofibers as the promising interfacial biomaterials for bone tissue engineering, **Hadi Samadian**, Hamid Mobasheri, Saeed Hasanpour, Jafar Ai, Mahmoud Azamie, Reza Faridi-Majidi, *Journal of Molecular Liquids* 298, 112021, 2020
36. Conducting polymer-based electrically conductive adhesive materials: design, fabrication, properties, and applications, Hossein Derakhshankhah, Rahim Mohammad-Rezaei, Bakhshali Massoumi, Mojtaba Abbasian, Aram Rezaei, **Hadi Samadian**, Mehdi Jaymand. *Journal of Materials Science: Materials in Electronics*, 1-15, 2020
37. Human plasma protein corona decreases the toxicity of pillar-layer metal organic framework, Samira Jafari, Zhila Izadi, Loghman Alaei, Mehdi Jaymand, **Hadi Samadian**, Valiollah Kashani, Hossein Derakhshankhah, Payam Hayati, Foad Noori, Kamran Mansouri, Faezeh Moakedi, Jan Janczak, Mohammad Jaafar Soltanian Fard & Nozar Fayaz bakhsh, *Scientific Reports*, 14569, 2020
38. Alginate hydrogel containing hydrogen sulfide as the functional wound dressing material: In vitro and in vivo study, Simin Nazarnezhadaa Ghasem Abbaszadeh-Goudarzi, Hadi Samadian, Mehdi Khaksari, Jila Majid, Ghatore Hossein Khastar, Nariman Rezaei, Seyed Reza Mousavi, Sadegh Shirian, Majid Salehi, *International Journal of Biological Macromolecules*, Volume 164, 2020
39. Gelatin-based nanofibrous electrically conductive scaffolds for tissue engineering applications, Bakhshali Massoumi, Mojtaba Abbasian, Balal Khalilzadeh, Rana Jahanban-Esfahlan, Aram Rezaei, **Hadi Samadian**, Hossein Derakhshankhah, Mehdi Jaymand, *International Journal of Polymeric Materials and Polymeric Biomaterials*, 1-10, 2020
40. PEGylated hollow pH-responsive polymeric nanocapsules for controlled drug delivery, Bakhshali Massoumi, Mojtaba Abbasian, Rana Jahanban-Esfahlan, Sanaz Motamedi, **Hadi Samadian**, Aram Rezaei, Hossein Derakhshankhah, Amir Farnudiyani-Habibi, Mehdi Jaymand, *Polymer International* 69 (5), 519-527, 2020
41. Iron oxide/Gold nanoparticles-decorated reduced graphene oxide nanohybrid as the thermo-radiotherapy agent, Kave Moloudi, **Hadi Samadian**, Mehdi Jaymand, Ehsan Khodamoradi, Mojtaba Hoseini-Ghahfarokhi, Farshid Fathi, *IET Nanobiotechnology*, 2020
42. Dual stimuli-responsive polymeric hollow nanocapsules as “smart” drug delivery system against cancer, Rana Jahanban-Esfahlan, Bakhshali Massoumi, Mojtaba Abbasian, Amir Farnudiyani-Habibi, **Hadi Samadian**, Aram Rezaei, Hossein Derakhshankhah, Mehdi Jaymand, *Polymer-Plastics Technology and Materials*, 1-13, 2020
43. A promising wound dressing based on alginate hydrogels containing vitamin D3 cross-linked by calcium carbonate/d-glucono- δ -lactone, Arian Ehterami, Majid Salehi, Saeed Farzamfar, **Hadi Samadian**, Ahmad Vaez, Hamed Sahrapeyma, Sadegh Ghorbani, *Biomedical Engineering Letters*, 1-11, 2020

44. A novel multi-stimuli-responsive theranostic nanomedicine based on Fe₃O₄@Au nanoparticles against cancer, Bakhshali Massoumi, Amir Farnudiyani-Habibi, Hossein Derakhshankhah, Hadi Samadian, Rana Jahanban-Esfahlan & Mehdi Jaymand, *Drug Development and Industrial Pharmacy*, Volume 46, 11, 2020
45. A novel bio-inspired conductive, biocompatible, and adhesive terpolymer based on polyaniline, polydopamine, and polylactide as scaffolding biomaterial for tissue engineering ..., Bakhshali Massoumi, Mojtaba Abbasian, Rana Jahanban-Esfahlan, Rahim Mohammad-Rezaei, Balal Khalilzadeh, **Hadi Samadian**, Aram Rezaei, Hossein Derakhshankhah, Mehdi Jaymand, *International journal of biological macromolecules* 147, 1174-1184, 2020
46. A de novo theranostic nanomedicine composed of PEGylated graphene oxide and gold nanoparticles for cancer therapy, **Hadi Samadian**, Rahim Mohammad-Rezaei, Rana Jahanban-Esfahlan, Bakhshali Massoumi, Mojtaba Abbasian, Abbas Jafarizad, Mehdi Jaymand, *Journal of Materials Research* 35 (4), 430-441, 2020
47. Antibacterial and antioxidant assessment of cellulose acetate/polycaprolactone nanofibrous mats impregnated with propolis, Kamyar Khoshnevisan, Hassan Maleki, **Hadi Samadian**, Maryam Doostan, Mohammad Reza Khorramizadeh, *International journal of biological macromolecules* 140, 1260-1268, 2019
48. Redox interactions and genotoxicity of metal-based nanoparticles: A comprehensive review, Keywan Mortezaee, Masoud Najafi, **Hadi Samadian**, Hamed Barabadi, Asaad Azarnezhad, Amirhossein Ahmadi, *Chemico-biological interactions* 312, 108814, 2019
49. Sciatic nerve regeneration by using collagen type I hydrogel containing naringin, **Hadi Samadian**, Ahmad Vaez, Arian Ehterami, Majid Salehi, Saeed Farzamfar, Hamed Sahrapeyma, Pirasteh Norouzi, *Journal of Materials Science: Materials in Medicine* 30 (9), 107, 2019
50. A systematic review of the genotoxicity and antigenotoxicity of biologically synthesized metallic nanomaterials: are green nanoparticles safe enough for clinical marketing?, Hamed Barabadi, Masoud Najafi, **Hadi Samadian**, Asaad Azarnezhad, Hossein Vahidi, Mohammad Ali Mahjoub, Mahbobeh Koochian, Amirhossein Ahmadi, *Medicina* 55 (8), 439, 2019
51. Scaffolding polymeric biomaterials: Are naturally occurring biological macromolecules more appropriate for tissue engineering?, Mojtaba Abbasian, Bakhshali Massoumi, Rahim Mohammad-Rezaei, **Hadi Samadian**, Mehdi Jaymand, *International journal of biological macromolecules* 134, 673-694, 2019
52. Chitosan/alginate hydrogels containing Alpha-tocopherol for wound healing in rat model, Arian Ehterami, Majid Salehi, Saeed Farzamfar, **Hadi Samadian**, Ahmad Vaez, Sadegh

Ghorbani, Jafar Ai, Hamed Sahrapeyma, *Journal of Drug Delivery Science and Technology* 51, 204-213, 2019

53. Evaluation of effective needleless electrospinning parameters controlling polyacrylonitrile nanofibers diameter via modeling artificial neural networks, **Hadi Samadian**, Seyed Salman Zakariaee, Reza Faridi-Majidi, *The Journal of the Textile Institute* 110 (4), 477-486, 2019
54. Recent advancements and new perspectives of phytonanotechnology, Pantea Mohammadi, Mahvash Hesari, **Hadi Samadian**, Marziyeh Hajialyani, Zahra Bayrami, Mohammad Hosein Farzaei, Mohammad Abdollahi, *Comprehensive Analytical Chemistry* 84, 1-22, 2019
55. Electroconductive scaffolds for tissue regeneration: Current opportunities, pitfalls, and potential solutions, Houra Nekounam, Shayan Gholizadeh, Zahra Allahyari, **Hadi Samadian**, Niloofar Nazeri, Mohammad Ali Shokrgozar, Reza Faridi-Majidi, 134, 111083, 2021
56. In vitro and in vivo evaluation of electrospun cellulose acetate/gelatin/hydroxyapatite nanocomposite mats for wound dressing applications, **Hadi Samadian**, Majid Salehi, Saeed Farzamfar, Ahmad Vaez, Arian Ehterami, Hamed Sahrapeyma, Arash Goodarzi, Sadegh Ghorbani, *Artificial cells, nanomedicine, and biotechnology* 46 (sup1), 964-974, 2018
57. Cellulose acetate electrospun nanofibers for drug delivery systems: Applications and recent advances, Kamyar Khoshnevisan, Hassan Maleki, **Hadi Samadian**, Shadab Shahsavari, Mohammad Hossein Sarrafzadeh, Bagher Larijani, Farid Abedin Dorkoosh, Vahid Haghpanah, Mohammad Reza Khorramizadeh, *Carbohydrate polymers* 198, 131-141, 2018
58. In vitro and in vivo study of PCL/COLL wound dressing loaded with insulin-chitosan nanoparticles on cutaneous wound healing in rats model, Arian Ehterami, Majid Salehi, Saeed Farzamfar, Ahmad Vaez, **Hadi Samadian**, Hamed Sahrapeyma, Mehdi Mirzaii, Sadegh Ghorbani, Arash Goodarzi, *International journal of biological macromolecules* 117, 601-609, 2018
59. Physical, dosimetric and clinical aspects and delivery systems in neutron capture therapy, Bagher Farhood, **Hadi Samadian**, Mahdi Ghorbani, Seyed Salman Zakariaee, Courtney Knaup, *Reports of Practical Oncology & Radiotherapy* 23 (5), 462-473, 2018
60. The promising potentials of capped gold nanoparticles for drug delivery systems, Kamyar Khoshnevisan, Maryam Daneshpour, Mohammad Barkhi, Morteza Gholami, **Hadi Samadian**, Hassan Maleki, *Journal of drug targeting* 26 (7), 525-532, 2018

61. Taurine-loaded poly (ϵ -caprolactone)/gelatin electrospun mat as a potential wound dressing material: In vitro and in vivo evaluation, Saeed Farzamfar, Mahdi Naseri-Nosar, **Hadi Samadian**, Simin Mahakizadeh, Roxsana Tajerian, Majid Rahmati, Ahmad Vaez, Majid Salehi, *Journal of Bioactive and Compatible Polymers* 33 (3), 282-294, 2018

62. Neural tissue regeneration by a gabapentin-loaded cellulose acetate/gelatin wet-electrospun scaffold, 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, *Cellulose* 25 (2), 1229-1238, 2018

63. Electrospinning of polyacrylonitrile nanofibers and simulation of electric field via finite element method, **Hadi Samadian**, Hamid Mobasheri, Saeed Hasanpour, Reza Faridi Majidi, *Nanomedicine Research Journal* 2 (2), 87-92, 2017

64. Needleless electrospinning system, an efficient platform to fabricate carbon nanofibers, **Hadi Samadian**, Hamid Mobasheri, Saeed Hasanpour, Reza Faridi-Majidi, *Journal of Nano Research* 50, 78-89, 2017

65. Folate-conjugated gold nanoparticle as a new nanoplatform for targeted cancer therapy, **Hadi Samadian**, Samira Hosseini-Nami, Seyed Kamran Kamrava, Habib Ghaznavi, Ali Shakeri-Zadeh, *Journal of cancer research and clinical oncology* 142 (11), 2217-2229, 2016

66. Effective parameters on conductivity of mineralized carbon nanofibers: an investigation using artificial neural networks, **Hadi Samadian**, Seyed Salman Zakariaee, Mahdi Adabi, Hamid Mobasheri, Mahmoud Azami, Reza Faridi-Majidi, *RSC advances* 6 (113), 111908-111918, 2016

67. Radiation protection and secondary cancer prevention using biological radioprotectors in radiotherapy, Hamid Abdollahi, Isaac Shiri, Mohammadreza Atashzar, Maghsoud Sarebani, Kave Moloudi, **Hadi Samadian**, *DNA repair* 29, 30, 2015

MENTORING AND CO-SUPERVISION

2018–2020

Mohammad Saeid Salami, Master student, Department of Medical Nanotechnology, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Project Title: Fabrication and optimization of Momordica charantia extract loaded electrospun Poly (ϵ caprolactone)/Collagen nanofibers as the wound dressing material, 2019–today

Simin Paknia, Master student, Department of Medical Nanotechnology, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Project Title: Fabrication and characterization of electro-conductive/osteoconductive hydrogel based on polydopamine-polyaniline co-polymer containing calcium phosphate nanoparticles, 2019–today

Majid Mousipour, Master student, Department of Medical Nanotechnology, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Project Title: Fabrication and characterization of electroactive nanofibers based on PCL/polydopamine-polyaniline co-polymer as a nerve tissue engineering scaffold 2020–today

Hashem Moradi, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Project Title: Kaolin incorporated nanofibers (chitosan/pva) as the wound dressing material, 2020-taody

Mehdi Ramin, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Project Title: Investigation of quaternary chitosan/PVA nanofibers containing propranolol as a wound dressing material, 2020-today

Elham Hariri, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran

Project Title: design, synthesis, and characterization of modified formulation based on natural polymers extracted from *plantago ovata* loading with mesalamine, 2020-today

Mryam Rashidi, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran

Project Title: Fabrication and assessment of curcumin-loaded pH-sensitive nanoparticles for colorectal cancer targeted drug delivery, 2020-today

Tayebeh Rizevandi, Master student, Department of Medical Nanotechnology, Kermanshah University of Medical Sciences, Kermanshah, Iran.

Project Title: Fabrication of scaffolds based on Hyaluronic acid containing ciprofloxacin as a wound dressing: assessment of physicochemical properties and in vitro studies, 2020-today

Soheila Zarei, Master student, Department of Medical Nanotechnology, Zanzan University of Medical Sciences, Zanzan, Iran.

Project Title: Fabrication, characterization, and application of 3D scaffold based on strontium-doped bioactive glass nanofibers as the bone tissue engineering scaffold, 2020-today

Mohana Haghbin, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran

Project Title: Fabrication and characterization of Persian gum-based hydrogel composited with gentamicin-loaded zeolite, 2020-today

Mohamad-Javad Rezaei, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran

Project Title: Fabrication, characterization, and application of wound dressing based on PVP nanofibers containing β -Cyclodextrin/Curcumin complex, 2020-today

Jafar-Asadi Hasanabadi, Pharm.D student, Faculty of Pharmacy, Kermanshah University of

Medical Sciences, Kermanshah, Iran

Project Title: Preparation and physicochemical evaluation of antibacterial nanocomposite based on CMC nanofibers containing β Cyclodextrin/erythromycin complex, 2020-today

Meysam Feizi, Pharm.D student, Faculty of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran

Project Title: Fabrication of electroactive nanocomposite based on carbon nanofibers/magnesium oxide nanoparticles for bone tissue engineering

REVIEWER OF THE JOURNALS

1. ACS chemical neurosciences
2. European journal of pharmaceutical sciences
3. International wound journal
4. Drug delivery science and technology
5. Nanotechnology
6. Artificial cell nanomedicine
7. Expert opinion in drug delivery
8. Jove
9. Current molecular medicine
10. Evidence-based complementary and alternative medicine
11. Biomedical engineering letters
12. Biocatalysis and Agricultural Biotechnology

NATIONAL AND INTERNATIONAL RESEARCH COLLABORATION

1. Prof. Jeff Bulte, T Professor of Radiology, Johns Hopkins University School of Medicine, Baltimore, USA.
Collaborative project: Folate receptor-targeted nanoprobe for molecular imaging of cancer
2. Prof. Sophie Laurent, Laboratory of NMR and Molecular Imaging, University of Mons, Mons B-7000, Belgium
Collaborative project: Gold nanoparticle-mediated bubbles in cancer nanotechnology.
3. Prof. Michael R Hamblin, Laser Research Centre, Faculty of Health Science, University of Johannesburg, Doornfontein 2028, South Africa.
Collaborative project: Radiolabeled carbon-based nanostructures.
4. Dr. Liliana Aranda-Lara, Laboratorio de Investigación Teranóstica, Facultad de Medicina, Universidad Autónoma del Estado de México, Toluca, 50180 Estado de México, Mexico.
Collaborative project: ultrasound-triggered drug delivery through lipid-based nanomaterials.
5. Prof. Luca De Stefano, Institute of Microelectronics and Microsystems, Italy.
Collaborative project: Diatomite micro- and nanoparticles for targeted drug delivery.
6. Dr. Shayan Gholizadeh, Department of Microsystems Engineering, Rochester Institute of Technology, 160 Lomb Memorial Drive, Rochester, NY 14623, USA
Collaborative project: Electroconductive scaffolds for tissue regeneration

7. Dr. Zahra Allahyari, Department of Biomedical Engineering, Rochester Institute of Technology, 160 Lomb Memorial Drive, Rochester, NY 14623, USA
Collaborative project: Electroconductive scaffolds for tissue regeneration.
8. Dr. Jan Janczak, Institute of Low Temperature and Structure Research Polish Academy of Sciences, P.O. Box 1410, Okolna 2 str., 50-950, Wrocław, Poland.
Collaborative project: Human plasma protein corona decreases the toxicity of pillar-layer metal organic framework
9. Prof. Thomas J. Webster, Department of Chemical Engineering, Northeastern University, Boston, MA, 02115, USA.
Collaborative project: Biodistribution, Pharmacokinetics and Toxicity of Bismuth-Based Nanomaterials.
10. Prof. Lobat Tayebi, Marquette University School of Dentistry, Milwaukee, WI 53233, USA
Collaborative project: Biodistribution, Pharmacokinetics and Toxicity of Bismuth-Based Nanomaterials.

METHOD KNOWLEDGE AND ANALYTICAL TECHNIQUES

Below are the main techniques Dr. Samadian is expert in:

Preparation and optimization of nanoparticles, nanofibers, pharmaceutical characterization of nanoparticles, different methods for chemical conjugation or physical adsorption of polymers on the surface of the NPs, fabrication of 3D porous scaffolds for tissue engineering applications, cell culturing techniques, lyophilization (freeze drying) technique, attenuated total reflectance-Fourier transform infrared spectroscopy (ATR-FTIR), UV-Visible spectroscopy, scanning electron microscopy (SEM) imaging, transmission electron microscopy (TEM) imaging of the NPs and cancer cells, cytotoxicity analyses of NPs, different techniques for chemical attachments of biomolecules and antibodies on the surface of the particles, techniques related to drug loading inside nanoparticles, evaluation of nanoparticle stability in plasma and aqueous solutions, drug loading methods, drug release study and identifying drug release kinetic, *In vitro* anti-proliferative effect of the nanoparticles on the cancer cells, fluorescent labelling of the nanoparticles, measuring reactive oxygen species (ROS), measuring reactive nitrogen oxide species (RNOS), genotoxicity analysis, haemolysis and NP interaction with red blood cells, nanoparticle toxicity assessments techniques, dynamic light scattering technique for measuring size, zeta potential and polydispersity index of the nanoparticles, statistical analysis of data.

BOOK CHAPTERS

1. CHAPTER 15: Nanodrug Delivery Formulations for Curcumin Absorption
Taghipour, Y.D., Samadian, H., Farzaei, M.H. 2021 Food Chemistry, Function and Analysis 2021-January(25), pp. 324-348
2. Recent advancements and new perspectives of phytonanotechnology Mohammadi, P., Hesari, M., Samadian, H., (...), Farzaei, M.H., Abdollahi, M. 2019 Comprehensive Analytical Chemistry 84, pp. 1-22

CONFERENCE PRESENTATIONS:

ICNS7: 7th International Conference on Nanostructures, Sharif University of Technology, Tehran,

Iran, 27 Feb- 1 Mar 2018, , Novel current-conducting electrospun carbon nanofibers for bone tissue engineering, Oral Presentation.

ICNS6: 6th International Conference on Nanostructures, Sharif University of Technology, Kish Island, Iran, March 2016, PAN based carbon nanofibers prepared by needleless electrospinning technology, Poster Presentation.

ICN2017: 6th International Conference on Nanotechnology, Science and Research Pioneers Institute (SRPioneers), Dubai, Emirates, February 2017, Electric field profile analysis of needle based electrospinning system, Oral presentation.

13th International Congress of Immunology and Allergy of Iran, Tabriz University of Medical Sciences, Tabriz, Iran, April 2016, Nano Immunology: a new era for resolving immunological issues, Poster presentation.

ICNF2017: 1th International Conference on Nanofibers, Tehran University of Medical Sciences, Tehran, Iran, October 21-22, Simulation of electric field applied in Electrospinning system, Poster presentation.