

Curriculum Vitae



Mohsen Chiani

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Personal Information:

Gender: *Male*

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Education:

2012-2018 PhD in Pharmaceutical Nanotechnology, Pasteur Institute of Iran, Tehran, Iran.

2000-2002 MSc in Clinical Biochemistry, Urmia University of Medical Science, Urmia, Iran.

1995-1999 BSc in Nutrition Sciences, Isfahan University of Medical Science, Isfahan, Iran.

Publications (Papers):

1. Akbarzadeh I, Keramati M, Azadi A, Afzali E, Shahbazi R, **Chiani M**, Norouzi D, Bakhshandeh H. Optimization, Physicochemical Characterization, and Antimicrobial Activity of a Novel Simvastatin Nano-niosomal Gel against E. coli and S. aureus. *Chemistry and Physics of Lipids*. Available online 21 November 2020, 105019. <https://doi.org/10.1016/j.chemphyslip.2020.105019>.
2. Akbarzadeh I, Tavakkoli Yarak M, Ahmadi S, **Chiani M**✉, Nourouzi D✉. Folic acid-functionalized niosomal nanoparticles for selective dual-drug delivery into breast cancer cells: An in-vitro investigation. *Advanced Powder Technology*. Accepted 16 August 2020. In Press
3. Zafari M, Adibi M, **Chiani M**, Bolourchi N, Barzi SM, Shams Nosrati MS, Bahari Z, Shirvani P, Akbari Noghabi K, Ebadi M, Rahimirad N, Shafiei M. Effects of cefazolin-containing niosome nanoparticles against methicillin-resistant Staphylococcus aureus biofilm formed on chronic wounds.

4. Mehrabi MR, Shokrgozar MA, Toliyat T, Shirzad M, Izadyari A, Zoghi-Mofrad L, **Chiani M**✉, Akbarzadeh A. Enhanced Therapeutic Efficacy of Vincristine Sulfate for Lymphoma Using Niosome-Based Drug Delivery. *Jundishapur Journal of Natural Pharmaceutical Products*: 15 (3); e82793
5. Akbari A, Akbarzadeh A, Rafiee Tehrani M, Ahangari Cohan R, **Chiani M**, Mehrabi MR. Development and characterization of nanoliposomal Hydroxyurea against BT-474 breast cancer cells. *Advanced Pharmaceutical Bulletin*, 2020, 10(1), 39-44.
6. **Chiani M**, Milani AT, Nemati M, ..., Khiyavi AA. Anticancer effect of cisplatin-loaded poly (Butylcyanoacrylate) nanoparticles on A172 brain cancer cells line. *Asian Pacific Journal of Cancer Prevention*. 2019; 20(1): 303-309.
7. Amiri B, Ahmadvand H, Farhadi A, Najmafshar A, **Chiani M**✉, Norouzian D✉. Delivery of vinblastine-containing niosomes results in potent in vitro/in vivo cytotoxicity on tumor cells. *Drug Dev Ind Pharm*. 2018 Aug;44(8):1371-1376.
8. **Chiani M**, Norouzian D, Shokrgozar MA, Azadmanesh K, Najmafshar A, Mehrabi MR, Akbarzadeh A. Folic acid conjugated nanoliposomes as promising carriers for targeted delivery of bleomycin. *Artif Cells Nanomed Biotechnol*. 2018 Jun;46(4):757-763.
9. Asgharkhani E, Fathi Azarbayjani A, Irani S, **Chiani M**, Saffari Z, Norouzian D, Akbarzadeh A, Atyabi SM. Artemisinin-loaded niosome and pegylated niosome: physico-chemical characterization and effects on MCF-7 cell proliferation. *J. Pharm. Investig.* (2018) 48: 251.
10. Mehrabi MR, Norouzian D, Shokrgozar MA, Toliyat T, **Chiani M**, Farhangi A, Alambin F, Akbarzadeh A. PEGylated niosomal nanoparticles loaded with vincristine: Characterization and in vitro evaluation. *Tropical Journal of Pharmaceutical Research* May 2017; 16 (5): 975-980.
11. **Chiani M**, Azadmanesh K, Shokrgozar MA, Mehrabi MR, Akbarzadeh A, Norouzian D. Enhanced antitumor effect of targeted nanoliposomal bleomycin. *Chem Biol Drug Des*. 2017 Nov;90(5):953-961.
12. Abdoli A, Radmehr N, Bolhasani A, Eidi A, Mehrbod P, Motevalli F, Kianmehr Z, **Chiani M**, Mahdavi M, Yazdani S, Shafiee Ardestani M, Kandi MR & Aghasadeghi MR. Conjugated anionic PEG-citrate G2 dendrimer with multi-epitopic HIV-1 vaccine candidate enhance the cellular immune responses in mice. *Artif Cells Nanomed Biotechnol*. 2017 Dec;45(8):1762-1768.
13. **Chiani M**, Shokrgozar MA, Azadmanesh K, Norouzian D, Mehrabi MR, Najmafshar A, Akbarzadeh A. Preparation, characterization, and in vitro evaluation of bleomycin- containing nanoliposomes. *Chem Biol Drug Des* 2016; 1–6 (in press).

14. Jabbari L, Torabi S, Peirovi A, **Chiani M**, Masoomi-Aladizgeh F, Norouzan D. Effect of pegylated nano niosomal 2, 4- dichlorophenoxyacetic acid on intracellular taxol production. Protocol Exchange Year published: (2016). DOI:doi:10.1038/protex.2016.008.
15. Mehrabi MR, Esmailpour P, Akbarzadeh A, Saffari Z, Farahnak M, Farhangi A, **Chiani M**✉. Efficacy of PEGylated Liposomal Etoposide Nanoparticles on Breast Cancer Cell Lines. Turk J Med Sci. 2016; 46: 567-571. DOI: 10.3906/sag-1412-67.
16. Amiri B, Ebrahimi-Far M, Saffari Z, Akbarzadeh A, Soleimani E, **Chiani M**✉. Preparation, Characterization and Cytotoxicity of Silibinin Containing Nanoniosomes in T47D Human Breast Carcinoma Cells. Asian Pacific Journal of Cancer Prevention, Vol 17, 2016. 3833-36.
17. Rabei H, Saffari Z, **Chiani M**, Farhanghi A and Norouzian D. Study of niosomated cytarabine. Journal of Chemical and Pharmaceutical Research, 2015, 7(4):1586-1590.
18. Ahmadi L, Akbarzadeh A, Chiani M, Masoud S. To Evaluate the Effect of Formulation of Nanoarchaeosomal 6-Gingerol on the Growth of Breast Cancer MCF-7 Cell Line. New Cellular & Molecular Biotechnology Journal. 2015; 5 (19), 47-51.
19. Asgharkhani E, Najmafshar A, **Chiani M**✉. Artemisinin (ART) drug delivery using mixed non-ionic surfactants and evaluation of their efficiency in different cancer cell lines. International Journal of Drug Delivery Technology. 2014; 4(4); 67-71.
20. Koohi Moftakhari Esfahani M, Alavi SE, Akbarzadeh A, Ghassemi S, Saffari Z, Farahnak M, **Chiani M**✉. PEGylation of Nanoliposomal Paclitaxel Enhances its Efficacy in Breast Cancer. Trop J Pharm Res, August 2014; 13(8): 211.
21. Gholami-Shabani MH, Akbarzadeh A, Norouzian D, Amini A, Gholami-Shabani Z, Imani A, **Chiani M**, Riazi GH, Shams-Ghahfarokhi M, Razzaghi-Abyaneh M. Antimicrobial Activity and Physical Characterization of Silver Nanoparticles Green Synthesized Using Nitrate Reductase from *Fusarium oxysporum*. Appl Biochem Biotechnol (2014) 172:4084–4098.
22. Arab-Salmanabadi S, Farjam MH, **Chiani M**. Characterization, Cytotoxicity and Antimicrobial Studies of (Z)-2-(3-(butylamino)- 4-oxopent-2-en-2-yl)-2-hydroxy-1H-indene 1,3(2H)-dione . Advances in Environmental Biology, 8(12) July 2014, Pages: 115-119.
23. Zarei M, Arjmand M, Mohammadi M, **Chiani M**, Ebrahimi H, et al. Preparation and in Vitro Evaluation of Nano-Niosomal Pegylated Paclitaxel and Nano-Liposomal Pegylated Paclitaxel. New Cellular & Molecular Biotechnology Journal. 2014; 5 (15), 107-113.
24. Dadgar N, Alavi ES, Koohi Moftakhari Esfahani M, **Chiani M**, Torabi S, Akbarzadeh A. Evaluation the cytotoxicity of nanoliposomal artemisinin on breast cancer cell line. New Cellular & Molecular Biotechnology Journal. 2014; 4 (13), 99-103.

25. Alavi SE, Mansouri H, Koohi Moftakhari Esfahani M, Movahedi F, Akbarzadeh A, **Chiani M**✉. Archaeosome: As New Drug Carrier for Delivery of Paclitaxel to Breast Cancer. *Ind J Clin Biochem*. DOI 10.1007/s12291-013-0305-4.
26. Zarei M, Norouzian D, **Chiani M**, Ebrahimi H, Mohammadi M and Akbarzadeh A. Advantages of Paclitaxel-Loaded Nano Niosomes to Nanoliposomal Formulation: An In Vitro Study. *Int. J. LifeSc. Bt & Pharm. Res.* 2013.
27. Dadgar N, Norouzian D, **Chiani M**, Ebrahimi Shamabadi H, Mehrabi SMR, Farhangi A, Akbarzadeh A. Effect of artemisinin liposome and artemisinin liposome polyethyleneglycol on MCF-7 cell line. *Int. J. LifeSc. Bt & Pharm. Res.* 2013.
28. Mohammadi H, Abedi A, Akbarzadeh A, Mokhtari MJ, Ebrahimi Shahmabadi H, Mehrabi MR, Javadian S, **Chiani M**. Evaluation of synthesized platinum nanoparticles on the MCF-7 and HepG-2 cancer cell lines. *International Nano Letters* 2013, 3:28 doi:10.1186/2228-5326-3-28.
29. Alavi SE, Koohi Moftakhari Esfahani M, **Chiani M**, Heidarinasab A. Evaluating the effect of nanoliposomal hydroxyurea urea on the breast cancer cell line. *New Cellular and Molecular Biotechnology Journal*. 2013; 3 (11), 63-67.
30. Farhangi A, Norouzian D, Mehrabi MR, **Chiani M**, Saffari Z, Farahnak M, Akbarzadeh A. Immunoisolated Transplantation of Purified Langerhans Islet Cells in Testis Cortex of Male Rats for Treatment of Streptozotocin Induced Diabetes Mellitus. *Ind J Clin Biochem* DOI 10.1007/s12291-013-0331-2.
31. Rastegari H, **Chiani M**, Akbarzadeh A, Cheraghi S, Saffari Z, Mehrabi MR, Farhangi A, Ghassemi S. Improvement in the Production of L-Lysine by Overexpression of Aspartokinase (ASK) in *C. glutamicum* ATCC 21799. *Tropical Journal of Pharmaceutical Research*. February 2013; 12 (1): 51-56.
32. Khalili M, Akbarzadeh A, **Chiani M**, Torabi S. The effect of Nanoliposomal and PE Gylated Nanoliposomal Forms of 6-Gingerol on Breast Cancer Cells. *Research Journal of Recent Sciences*. Vol. 2(5), 29-33, May (2013).
33. Koohi Moftakhari Esfahani M, Alavi SE, Heidarinasab A, **Chiani M**, Akbarzadeh A. Making paclitaxel nanoliposomal and evaluating its effect on the MCF-7. *New Cellular & Molecular Biotechnology Journal*. 2013; 3 (10): 67-71.
34. Najmafshar A, **Chiani M**, Hossein Nezhad A, Kalantari S, Mazloom zadeh S, Osat Mellati A. The Correlation between Overweight and Obesity with Plasma Levels of Leptin, Insulin and SdLDL in People Over 20 Years Old. *J Obes Wt Loss Ther.* 2012; Volume 2, Issue 8, 1000150.
35. Mokhtari MJ, Akbarzadeh A, Hashemi M, Javadi GR, Mahdian R, Ghasemi S, Kamiab AR,

- Hoseineian Z, **Chiani M**, Taghavi MS. Cisplatin Induces Up-Regulation of KAI1, a Metastasis Suppressor Gene, in MCF-7 Breast Cancer Cell Line. *Tropical Journal of Pharmaceutical Research* August 2012; 13 (4): 523-529.
36. Farhangi A, Akbarzadeh A, Mehrabi MR, **Chiani M**, Saffari Z, Mortazavi M, Ghassemi S. Immunotherapy of 436 Morphine Addicts by Therapeutic Morphine Vaccine in Kerman Province (I.R. Iran). *Journal of Vaccines & Vaccination*; 2011, Vol. 2 Issue 2, p1.
37. Alvandi E, Akrami SM, **Chiani M**, Hedayati M, Noori Nayer B, Mohajeri Tehrani MR, Nakhjavani M, Pedram M. Molecular Analysis of the RET Proto-Oncogene Key Exons in Patients with Medullary Thyroid Carcinoma: A Comprehensive Study of the Iranian Population. *THYROID*, Volume 21, Number 4, 2011.
38. Naderi N, Farnood A, Habibi M, Zojaji H, Balaii H, Firouzi F, **Chiani M**, Derakhshan F, Tahami A, Aghazadeh R, Ebrahimi Daryani N, Zali MR. NOD2 exonic variations in Iranian Crohn's disease patients. *Int J Colorectal Dis* (2011) 26:775–781.
39. Farnood A, Naderi N, Habibi M, Balaie H, Zojaji H, Firouzi F, **Chiani M**, Derakhshan F, Aghazadeh R, Ebrahimi Daryani N. NOD2 novel mutations in Iranian Crohn's patients. *Medical Sciences Journal of Islamic Azad University*, 2011; 20(4): 235-240.
40. Tajbakhsh M, Noory Nayer B, Motavaze K, Kharaziha P, **Chiani M**, Zali MR, Klena JD. Phylogenetic relationship of Salmonella enterica strains in Tehran, Iran, using 16S rRNA and gyrB gene sequences. *The Journal of Infection in Developing Countries* 2011; 5(6):465-472.
41. Zali N, Mohebbi SR, Esteghamat S, **Chiani M**, Montazer Haghighi M, Hosseini-Asl SMK, Derakhshan F, Mohammad-Alizadeh AH, Malek-Hosseini SA, Zali MR. Prevalence of ATP7B Gene Mutations in Iranian Patients with Wilson Disease. *Hepat Mon.*2011;11(11):890-894. DOI: 10.5812/kowsar.1735143X.762.
42. Sohrabi S, Akbarzadeh A, Norouzian D, Farhangi A, Mortazavi M, Mehrabi MR, **Chiani M**, Saffari Z, Ghassemi S. Production and Purification of Rabbit's Polyclonal Antibody against Factor VIII. *Ind J Clin Biochem*. DOI 10.1007/s12291-011-0142-2.
43. Norouzian D, Farhangi A, Tolooei S, Saffari Z, Mehrabi MR, **Chiani M**, Ghassemi S, Farahnak M, Akbarzadeh A. Study of nano-fiber cellulose production by Glucanacetobacter xylinum ATCC 10245. *Pak J Biol Sci*. 2011 Aug 1;14(15):780-4.
44. Gholami Shabani MH, Imani A, Razzaghi Abyaneh M, Riazi G, **Chiani M**, Khademi Mazdeh S, Chamani M, Akbarzadeh A. Extracellular Production of Silver Nano-Particles by Fusarium Oxusporum Laboratory Scale. *Journal of Microbial Biotechnology*. 2011; 3(10):23-26.
45. **Chiani M**, Akbarzadeh A, Farhangi A, Mehrabi MR. Production of Desferrioxamine B (Desferal)

- using Corn Steep Liquor in *Streptomyces pilosus*. Pak J Biol Sci. 2010 Dec 1;13(23):1151-5.
46. Farhangi A, Akbarzadeh A, Mehrabi MR, **Chiani M**, Saffari Z, Ghassemi S, Kheiri M, Bashar R. Safety of Human Therapeutic Morphine Vaccine Employing Lohmann Specific Free Eggs. Pak J Biol Sci. 2010 Nov 1;13(21):1047-51.
47. **Chiani M**, Akbarzadeh A, Farhangi A, Mazinani M, Saffari Z, Emadzadeh K, Mehrabi MR. Optimization of culture medium to increase the production of Desferrioxamine B (Desferal) in *Streptomyces pilosus*. Pak J Biol Sci. 2010 Jun 1;13(11):546-50.
48. Cheraghi S, Akbarzade A, Farhangi A, **Chiani M**, Saffari Z, Ghassemi S, Rastegari H, Mehrabi MR. Improved Production of L-lysine by Over- expression of Meso-diaminopimelate Decarboxylase Enzyme of *Corynebacterium glutamicum* in *Escherichia coli*. Pak. J. Biol. Sci. 13(10): 504-508, 2010.
49. Nochi Z, Sahebkhari N, Kharaziha P, **Chiani M**, Motavaze K, Dabiri H, Jafari F, Edalatkhah H, Zali MR, Noorinayer B. Comparison of 16S rRNA, 23S rRNA and gyrB genes sequences in phylogenetic relationships of *Shigella* isolates from Iran. Annals of Microbiology, 59 (3) 615-622 (2009).
50. Akbarzadeh A, Norouzian D, Farhangi A, Mehrabi MR, **Chiani M**, Zare D, Saffari Z, Mortazavi M, Nikdel A. Immunotherapy of 347 Volunteer Outpatient Morphine Addicts by Human Therapeutic Morphine Vaccine in Kermanshah Province of Iran. Journal of Pharmacology and Toxicology 01/2009; 4(1):30-35. DOI: 10.3923/jpt.2009.30.35.
51. Najjar Sadeghi R, Zojaji H, Mohebbi SR, **Chiani M**, Vahedi M, Mirsattari D, Molaei M, Mashayekhi R, Zali MR. Evaluation of global genome methylation in gastritis lesion and its correlation with clinicopathological findings. Oncol Res. 2009;17(11-12):549-58.
52. Najjar Sadeghi R, Zojaji H, Mohebbi SR, **Chiani M**, Mirsattari D, Pourhoseingholi MA, Molaei M, Mashayekhi R, Derakhshan F, Zali MR. Global Genome Methylation Status in Gastritis Lesion in Comparison with Normal Adjacent Tissue and its Relationship with Clinicopathologic Findings. Yakhteh Medical Journal. Vol 10, No 4, winter 2009, Pages: 272-279.
53. Bayat B, Yazdani S, Alavi A, **Chiani M**, Chitsazian F, Tusi BK, Suri F, Narooie-Nejhad M, Sanati MH, Elahi E. Contributions of MYOC and CYP1B1 mutations to JOAG. Mol Vis. 2008 Mar 13;14:508-17.
54. Zali N, Mohebbi SR, Esteghamati S, Firouzi F, Hosseini Asl SMK, **Chiani M**, Derakhshan F, Mohammad Alizadeh AH, Malek Hosseini SA, Zali MR. Mutation spectrum of 7 exons of ATP7B gene in Iranian patients with Wilson disease. Gastroenterology and Hepatology from bed to bench. 2008;1(1):3-9.

55. Mohebbi SR, Amini-Bavil-Olyae S, Zali N, Noorinayer B, Derakhshan F, **Chiani M**, Nejad MR, Antikchi MH, Sabahi F, Zali MR. Molecular epidemiology of hepatitis B virus in Iran. *Clin Microbiol Infect.* 2008 Sep;14(9):858-66.
56. Nourouzzadeh J, Eftekhari E, **Chiani M**, Hejazi S. Serum Antioxidant Markers in Patients With Major And Minor B-Thalassemia. *Journal of Kermanshah University of Medical Sciences (Behbood).* 2008; 12 (136), 49-58.
57. Alavi A, Elahi E, Tehrani MH, Amoli FA, Javadi MA, Rafati N, **Chiani M**, Banihosseini SS, Bayat B, Kalhor R, Amini SS. Four mutations (three novels, one founder) in TACSTD2 among Iranian GDLN patients. *Invest Ophthalmol Vis Sci.* 2007 Oct;48(10):4490-7.
58. Aghajani K, Noorinayer B, **Chiani M**, Ghiasi S, Tashakori M, et al. Mismatch Repair Gene Mutations in Iranian HNPCC Families. *The American Journal of Gastroenterology.* 2007; 102 (2).
59. Norooz zadeh J, **Chiani M**, Khadem Ansari M, Hejazi S. Vit E and Oxidative Stress In Beta thalassemia patients. *Urmia Medical Journal.* 2005; 2:65-70.
60. Nourouzzadeh J, **Chiani M**, Khadem Ansari M, Hejazi S. Plasma measures of oxidative stress in β -thalassemia. *The journal of Urmia University of Medical Sciences.* 2005; 16 (2), 65-70.

International Conference presentations:

1. Mahsa Adibi, Morvarid Shafiei, Parisa Shirvani, Alireza Kheirollahi, Mohammad Shams, **Mohsen Chiani**. The evaluation of the antibiofilm activity of Niosome Nanoparticles with cefazolin antibiotic against Biofilm of Methicilin Resistant Staphylococcus aureus (MRSA) isolates. The 3rd International Congress on Biomedicine. 6th - 14th November 2019. <https://www.icbcongress.com/2019/articles2019-new2.pdf>. University of Kufa (Iraq), University of Kateb (Afghanistan), United Nations Educational, Scientific and Cultural Organization (UNESCO), Avicenna International College (Hungary), Research Institute of Nasim (International), Shahid Beheshti University of Medical Sciences (Iran), Islamic Azad University, Tehran North Branch (Iran).
2. Parisa Shirvani, **Mohsen Chiani**, Mahsa Adibi, Zeinab Bahari, Morvarid Shafiei. The evaluation of the antibiofilm activity of Niosome Nanoparticles with Clindamycin antibiotic against Biofilm of Methicilin Resistant Staphylococcus aureus (MRSA) isolates. The 3rd International Congress on Biomedicine. 6th - 14th November 2019. <https://www.icbcongress.com/2019/articles2019-new2.pdf>.
3. Parisa Shirvani - **Mohsen Chiani** - Mahsa Adibi - Zeinab Bahari - Morvarid Shafiei. The evaluation of the antibiofilm activity of Niosome Nanoparticles with Clindamycin antibiotic against Biofilm of Methicilin Resistant Staphylococcus aureus (MRSA) isolates. The 4th international and 6th national

- congress of wound and tissue repair. Tehran, 19 Nov 2019. <https://civilica.com/doc/982609/>
4. Kanaani Leila, Mehrdiba Torkan, **Chiani Mohsen**, Saffari Zahra, Akbarzadeh Khiyavi Azim. Preparation, Characterization and Cytotoxic Studies of Carboplatin-Containing Nanoniosome on Ovarian Cancer Cells. International Conference on Research in Science and Technology. 15 Nov 2016. Vol5. London, UK.
 5. Elnaz Asgharkhany, Dariush Norouzian, Azim Akbarzadeh, **Mohsen Chiani**. Artemisinin Drug Delivery Using Multiple Surfactants and Evaluation of their Efficiencies in Different Cell Lines. 1st Tabriz International Life Science Conference and 12th Iran Biophysical Chemistry Conference. 22-24 May 2013.
 6. Mohammad Zarei, Arjmand Mehdi, Mohammadi Mahshid, **Chiani Mohsen**, Ebrahimi Hasan, Akbarzadeh Khiavi Azim. Preparation of Nanoniosomal Paclitaxel Formulation and Evaluation its Effects on the Breast Cancer Cell Line (MCF-7). National Congress on Medicinal Plants. 15-16 May, 2013, Tehran, Iran.
 7. Azim Akbarzadeh, Dariush Nourouzian, Ali Farhangi, Mohammad Reza Mehrabi, Mohammad Atyabi, Davood Zare, Mohammad Karim Emadzadeh, Hadi Ansari Hadipoor, Mehri Mortazavi, Zahra Saffari, Morvarid Shafiee, **Mohsen Chiani**, Yasha Anvari, Ali Nikdel, Saeideh Khanbabaei. Immunotherapy of morphine addicts by therapeutic morphine vaccine in Kerman province. The first international congress on health genomics and biotechnology. November 24-26, 2007-Tehran, Iran.
 8. Azim Akbarzadeh, Dariush Nourouzian, Ali Farhangi, Mohammad Reza Mehrabi, Morvarid Shafiee, Mehri Mortazavi, Davood Zare, Maryam Mardaneh, Zeynab Nemati, Yasha Anvari, **Mohsen Chiani**, Sima binafar, Saeideh Khanbabaei. Mutation of streptomyces pilosus 40714 to obtain high titer of desferrioxamine producing fused cells of streptomyces pilosus. The first international congress on health genomics and biotechnology. November 24-26, 2007-Tehran, Iran.
 9. Mahmood Faraz, Babak Nourinayyer, Pedram Kharaziha, Farinaz Ghaderi, Parvin Rostami, Fateme Sadat Esteghamat, **Mohsen Chiani**, Anvarsadat Kian Mehr, Faramarz Derakhshan, Mohammad Reza Zali. Evaluation of APC gene polymorphism in a sample of Iranian population. The first international congress on health genomics and biotechnology. November 24-26, 2007-Tehran, Iran.
 10. Zahra Nochi, Navid Sahebekhtiari, Pedram Kharaziha, **Mohsen Chiani**, Hossein Dabiri, Mohammad Reza Zali. Phylogenetic analyses of shigella strains based on the GYRB gene sequence. The 9th Iranian congress of biotechnology and the 2nd international congress of biochemistry and molecular biology. Shiraz-Iran. Oct. 29-Nov, 1,2007.
 11. **Mohsen Chiani**, Jaffar Norouz Zadeh. Oxidative stress and antioxidant status in beta thalassemia major. The 9th Iranian congress of biotechnology and the 2nd international congress of biochemistry

- and molecular biology. Shiraz-Iran. Oct. 29-Nov, 1, 2007.
12. Mercedeh Tajbakhsh, Babak Noori Nayyer, Kamyar Motavaze, Zahra Nochi, **Mohsen Chiani**, Pedram Kharaziha, Mohammad Reza Zali. Use of GYRB gene sequences to determine phylogenetic relationship. The 9th Iranian congress of biotechnology and the 2nd international congress of biochemistry and molecular biology Shiraz-Iran. Oct. 29-Nov, 1,2007.
 13. Zahra Nochi, Navid Sahebekhtiari, Pedram Kharaziha, **Mohsen Chiani**, Hossein Dabiri, Mohammad Reza Zali. The first international congress on health genomics and biotechnology November 24-26, 2007-Tehran, Iran.
 14. Seyed Reza Mohebbi, Babak Noorinayer, Narges Zali, Samad Amini-Bavil- Olyae, **Mohsen Chiani**, Mohammad Rostami, Faramarz Derakhshan, Kamran Shateri, Farzane Sabahi, Mohammad Reza Zali. Molecular epidemiology and phylogenetic characterization of HBV in Iran. The 8th annual research congress of Iranian medical students & the 1st international student congress on medical research in Iran.
 15. Katayoun Aghajani, Babak Noorinayer, **Mohsen Chiani**, Somayeh Ghiasi, Mehrnoosh Tashakori, Navaz Karimianpour, Nasim Rahnamaye chitsaz, Mahsa Molae, Faramarz Derakhshan, Maurizio Ponz de Leon, Mohammad Reza Zali. Mismatch repair gene mutations in Iranian HNPCC families. ACG 2007: The American college of gastroenterology annual scientific meeting. Abstract No.750812.

Thesis Supervisor/Advisor

1. Evaluation of the antibiofilm activity of niosome nanoparticles with cefazolin antibiotic against biofilm of methicilin resistant staphylococcus aureus (MRSA) isolates.
2. Antibiofilm activity of niosome nanoparticles containing clindamycin against biofilm of methicilin resistant staphylococcus aureus (MRSA) isolates.
3. Anticancer activity of nano archaeosomes containing 6-gingerol on human breast cancer cells.
4. Preparation, characterization and cytotoxicity of silibinin containing nanoniosomes on T47D human breast carcinoma cells.
5. Evaluation of the anticancer activity of artemisinin containing nanoliposomes against MCF-7 human breast cancer cells..
6. Antibacterial and anticancer activity of nanoliposomal and PEGylated nanoliposomal forms of 6-gingerol.
7. Preparation, characterization and cytotoxicity evaluation of cytarabine loaded nanoniosomes on breast cancer cells.

Collaboration in Research Projects:

1. Development and evaluating effectiveness of niosomal gel and biocompatible dressing containing engineered serratiopeptidase in controlling wound infection and acceleration of healing process.
2. The antibacterial and antibiofilm efficacy study of liposomes containing Phycocyanin and Clindamycin antibiotic on *Staphylococcus aureus* and methicillin resistant *Staphylococcus aureus* (MRSA) strains.
3. Design and cloning of full length and truncated recombinant forms of SeHAS (*S.equisimilis* Hyaluronan synthase) and evaluation of enzymatic synthesis of hyaluronan oligo- and polysaccharides for infectious wounds healing.
4. Modification of glass surface by cold jet plasma in order to immobilize protein A for biosensor application.
5. Letrozole and curcumin-containing liposomes: the anticancer activity and its effects on expression of apoptotic genes in MCF-7 breast cancer cells.
6. Co-delivery of letrozole and curcumin in liposome nanocarriers to breast cancer MCF-7 cells and evaluation of its effect on expression of apoptosis related genes (bcl2 and bax).
7. Conjugation of heparin to collagen type 1.
8. Nanoliposomal encapsulation of human recombinant erythropoietin and evaluation of physicochemical properties thereof.

Patents:

1. Design, synthesis and optimization the production of letrozole and curcumin-loaded niosomes. Registration number: 139850140003007561.
2. Preparation of PEGylated liposomes containing bee venom. Registration number: 139850140003006309.

GenBank Submission:

Submission of 612 sequences from different strains of bacteria including *Shigella*, *Salmonella*, *Escherichia coli* and *Hepatitis B Virus* into the GenBank database. Almost all are first reports and some of them are first world records. Ncbi.nlm.nih.gov/nuccore.

Book translation and compilation:

1. Applications of Nanotechnology in Medicine and Industry.
Collection and compilation. ISBN: 978-600-04-1670-6160000.
2. Nano drug delivery and its applications in breast cancer.
Collection and compilation. ISBN: 978-600-364-623-0.
3. Nano drug delivery and its applications in brain cancer.
Collection and compilation. ISBN: 978-600-7827-37-6.
4. General Biochemistry.
Collection and compilation. ISBN: 978-964-04-1932-8.
5. Nano Dictionary.
Collection and compilation. ISBN: 978-964-413-247-6.
6. Inorganic Chemistry in Biology.
*Edited by: Patricia C. Wilkins and Ralph G. Wilkins.
Translation: ISBN: 978-964-04-5186-1.*
7. Nanotechnology Concepts, Applications and Perspectives.
Edited by: C.M. Niemeyer, C.A. Mirkin. Translation: ISBN: 978-964-04-8801-0.
8. Nanotechnology, Principles and Practices.
Edited by: Sulabha K., Kulakarni. Translation. ISBN: 978-964-04-9970-2.
9. Food toxicology.
Edited by: William Helferich, Karl K. Winter. Translation: ISBN: 964-460-643-4.
10. Genes and disease.
*Edited by: National Center for Biotechnology Information (U.S).
Translation. ISBN: 978-964-04-7898-1.*
11. Effect of osmotic tension of size and morphology of Liposomes.
Edited by: Helen Moen. Translation. ISBN: 978-600-04-3542-4.

Professional Experiences / Techniques familiar with:

- Nano drug delivery systems and drug targeting.
- Familiar with HPLC, TLC, Gel filtration Chromatography, Zetasizer (DLS), Electrophoresis, DNA Sequencing, Fragment Analysis, Genotyping, Primer designing, SDS- PAGE, Blotting techniques, etc.
- Basic clinical laboratory techniques including: Hematology, Parasitology, Microbiology,

Serology, Immunology and Biochemistry.

- Cellular and Molecular biology: Nucleic acids purification by different methods; Nucleic acids amplification by PCR; Antibody extraction; Cloning and subcloning of DNA fragments in plasmids, restriction analysis, transformation, digestion, ligation, etc.
- Work experience with laboratory animals (handling, injections, blood sampling and).
- Familiar with most of applied Softwares such as SPSS, Graphpad prism, Excel, Access, Powerpoint, Gene runner, Laser gene 6 etc.
- Microbial culture, Protoplast fusion in bacteria.
- Familiar with biosafety and biosecurity issues in research laboratory as a biosafety officer of Nanobiotechnology Department in Pasteur Institute of Iran

References:

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