

Resume

1. Personal Information

First Name: Fariba
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2. Educational Records

Degree	Date	Department / Group	University	Country / City	Grade (from 20)
B.Sc.	1993-1997	Chemical Engineering	Sharif University of Technology	Iran / Tehran	17.02
M.Sc.	1997-1999	Chemical Engineering / Biomedical Engineering	Sharif University of Technology	Iran / Tehran	18.64
PhD.	1999- 2006	Chemical Engineering / Biomedical Engineering	Sharif University of Technology	Iran / Tehran	18.06

3. Honors and Awards

- 1- 1st ranked in Chemical Engineering. Dep. for B.Sc. period and received a letter of appreciation from the minister of science of Iran, 1997.
- 2- 1st ranked in Chemical Engineering. Dep. for M.Sc. period and received a letter of appreciation from the minister of science of Iran, 1999
- 3- Sharif University Open Doctoral Fellowship for Outstanding Students for two years.
- 4- Scholarship from Ministry of Science of Iran for six months as a visiting researcher (in Toronto University, Canada).
- 5- 1st ranked in Chemical Engineering. Dep. for PhD period and received a letter of appreciation from the minister of petroleum of Iran, 2007.
- 6- Superior researcher In Tarbiat Modares University and received 10000\$ research grant.

4. Research Interest

- 1- **Novel Drug delivery Systems** (based on micellar nanoparticles, transdermal patches and microneedles, injectable in situ forming hydrogels , ...)
- 2- **Intelligent Polymers in Biomedical Application**
- 3- **Tissue engineering** (based on releasing scaffold, injectable scaffold ,)

5. Teaching Experience

- 1- Design and Mathematical Modelling of Drug Delivery Systems
- 2- Transport Phenomena in Biomedical Engineering
- 3- Tissue Engineering Reactor Design
- 4- Polymer Engineering

6. Papers

1. M. Nasrollahzadeh, F. Ganji, S.M. Taghizadeh, E. Vasheghani-Farahani, M. Mohiti-Asli, Drug in adhesive transdermal patch containing antibiotic-loaded solid lipid nanoparticles, *Journal of Bioscience and Bioengineering*, **2022**, 134(5), 471-476.
2. A. Soroushnia, F. Ganji, E. Vasheghani-Farahani, H. Mobedi, Effect of combined stabilizers on midazolam nanosuspension properties, *Iranian Polymer Journal*, **2022**, 31:215–222.
3. H. Shaki, E. Vasheghani-Farahani, F. Ganji, S. Jafarzadeh-Holagh, N. Taebnia, A. Dolatshahi-Pirouzb, A self-assembled dextran-stearic acid-spermine nanocarrier for delivery of rapamycin as a hydrophobic drug, *Journal of Drug Delivery Science and Technology*, **2021**, 66, 102768.
4. A. Seddighian, **F. Ganji**, M. Baghban-Eslaminejad, F. Bagheri, Electrospun PCL scaffold modified with chitosan nanoparticles for enhanced bone regeneration, *Progress in Biomaterials*, **2021**, 10, 65-76.
5. F. Kazemi-Aghdam, V. Jahed, M. Dehghan-Niri, **F. Ganji**, E. Vasheghani-Farahani, Injectable chitosan hydrogel embedding modified halloysite nanotubes for bone tissue engineering, *Carbohydrate Polymers*, **2021**, 269, 118311.
6. A. Soroushnia, **F. Ganji**, E. Vasheghani-Farahani, H. Mobedi, Preparation, optimization, and evaluation of midazolam nanosuspension: enhanced bioavailability for buccal administration, *Progress in Biomaterials*, **2021**, 10, 19-28.
7. S. Iraj, **F. Ganji**, L. Rashidi, Surface modified mesoporous silica nanoparticles as sustained-release gallic acid nano-carriers, *Journal of Drug Delivery Science and Technology*, **2018**, 47, 468-476.
8. A. Soroushnia, **F. Ganji**, E. Vasheghani-Farahani, H. Mobedi, Development and evaluation of an anti-epileptic oral fast-dissolving film with enhanced dissolution and *in vivo* permeation, *Current Drug Delivery*, **2018**, 15, 1294-1304.
9. M. Kheradmandi, E. Vasheghani-Farahani, A. Ghiaseddin, **F. Ganji**, Skeletal muscle regeneration via engineered tissue culture over electrospun nanofibrous chitosan/PVA scaffold, *J Biomed Mater Res Part A*, **2016**, 104(7), 1720-1727.
10. F. Rezaee, **F. Ganji**, Formulation, characterization, and optimization of captopril fast-dissolving oral films, *AAPS PharmSciTech*, DOI: 10.1208/s12249-018-1027-y.
11. M. Darestani-Farahania, E. Vasheghani-Farahani, H. Mobedi, **F. Ganji**, The effect of solvent composition on vancomycin hydrochloride and free base vancomycin release from in situ forming implants, *Polymer Advanced Technology*, **2016**, 27 1653–1663.
12. H. Shaki, **F. Ganji**, P.J. Kempenb, A. Dolatshahi-Pirouzb, E.m Vasheghani-Farahani, Self-assembled amphiphilic-dextran nanomicelles for delivery of rapamycin, *Journal of Drug Delivery Science and Technology*, **2018**, 44, 333-341.
13. M. Nasrollahzadeh, **F. Ganji**, S.M. Taghizadeh, E. Vasheghani-Farahani D-optimal experimental design analysis in preparing optimal polyisobutylene based pressure sensitive adhesives, *International Journal of Adhesion and Adhesive*, **2017**, 78: 28-37.
14. N. Omidvar, **F. Ganji**, M.R. Baghban-Eslaminejad, *In vitro* osteogenic induction of human marrow-derived mesenchymal stem cells by PCL fibrous scaffolds containing dexamethazone-loaded chitosan microspheres, *Journal of Biomedical Material Research, Part A*, **2016**, 104(7):1657-67.

15. Y. Pakzad, **F. Ganji**, Thermosensitive hydrogel for periodontal application: In vitro drug release, antibacterial activity and toxicity evaluation, *Journal of Biomaterials Applications*, **2016**, 30(7) 919–929.
16. F. Ghasemi-Tahrir, **F. Ganji**, A.R. Mani, E. Khodaverdi, *In vitro* and *in vivo* evaluation of thermosensitive chitosan hydrogel for sustained release of insulin, *Drug Delivery*, **2014**, 9:1-9.
17. F. Hoobakht, **F. Ganji**, E. Vasheghani-Farahani, S.M. Mousavi, Eudragit RS PO nanoparticles for sustained release of pyridostigmine bromide, *Journal of Nanoparticle Research*, **2013**, 15:1912.
18. **F. Ganji**, M.J. Abdekhodaie, The effects of reaction conditions on block copolymerization of chitosan and poly(ethylene glycol)", *Carbohydrate Polymers*, **2010**, 81(4), 799-804.
19. **F. Ganji**, M.J. Abdekhodaie, Chitosan-g-PLGA copolymer as a thermosensitive membrane, *Carbohydrate Polymers*, **2010**, 80(3), 740-746.
20. **F. Ganji**, M.J. Abdekhodaie, Synthesis and Characterization of a New Thermoreversible Chitosan-PEG Diblock copolymer, *Carbohydrate Polymers*, **2008**, 74, 435–441.
21. M. Mahmoudian, **F. Ganji**, Vancomycin-loaded HPMC microparticles embedded within injectable thermosensitive chitosan hydrogels, *Progress in Biomaterials* (**2017**), 6:49–56
22. A. Soroushnia, **F. Ganji**, S. M. Taghizadeh, Transdermal Delivery of Desmopressin Acetate from Water-in-Oil Nano/Submicron Emulsion Systems, *Iranian Journal of Chemical Engineering*, **2016**, 13(4), 3-13.
23. M. Sadeghi, **F. Ganji**, S.M. Taghizadeh, B Daraei, Preparation and Characterization of Rivastigmine Transdermal Patch Based on Chitosan Microparticles, *Iranian Journal of Pharmaceutica Research*, **2016**, 15(3):283-294.
24. M. Karimzadeh, L. Rashidi, **F. Ganji**, M. Ahmadi, S. Tahmasebi Enferadi, Application of mesoporous silica nanoparticles as a drug delivery system for rivastigmine hydrogen tartarate, *Iranian Journal of Biomedical Engineering*, **2015**, 8:386-399.
25. M. Sadeghi, **F. Ganji**, S.M. Taghizadeh, Preparation and optimization of labeled chitosan nanoparticles and evaluation of their release from transdermal drug delivery system, *Iranian Journal of Polymer Science and Technology*, **2015**, 28(4): 333-344.
26. M. Dehghan-Niri, M. Tavakol, E. Vasheghani-Farahani, **F. Ganji**, Drug release from enzyme-mediated in situ-forming hydrogel based on gum tragacanth–tyramine conjugate, *Journal of Biomaterials Application*, **2015**, 29(10), 1343–1350.
27. S. Iraj, L. Rashidi, **F. Ganji**, Functionalized Mesoporous Silica Nanoparticles as a Novel Antioxidant Delivery System, *Iranian Journal of Chemical Engineering*, **2015**, 12(4), 93-100.
28. L. Rashidi, E. Vasheghani-Farahani, M. Soleimani, A. Atashi, Kh. Rostami, **F. Ganji**, M. Fallahpour, M. Taher Tahouri, A cellular uptake and cytotoxicity properties study of gallic acid-loaded mesoporous silica nanoparticles on Caco-2 cells, *Journal of Nanoparticle Research*, **2014** 16:2285.
29. L. Rashidi, E. Vasheghani-Farahani, Kh. Rostami, **F. Ganji**, M. Fallahpour, Mesoporous silica nanoparticles with different pore sizes for delivery of pH-sensitive gallic acid, *Asia-Pacific Journal of Chemical Engineering*, **2014**, 9: 845–853.
30. H. Shaki, E. Vasheghani-Farahani, SA. Shojaosadati, **F. Ganji**, Optimizing Formulation Variables of KCl Loaded Waxy Microspheres, *Iranian Journal of Pharmaceutical Science*, **2014**, 10(1): 37- 54.
31. L. Rashidi, E. Vasheghani-Farahani, Kh. Rostami, **F. Ganji**, M. Fallahpour, Mesoporous Silica Nanoparticles as a Nanocarrier for Delivery of Vitamin C, *Iranian Journal of Biotechnology*, **2013** 11(4): 209-13.
32. E. Khodaverdi, **F. Ganji**, M. Tafaghodi, M. Sadoogh, Effects of formulation properties on sol-gel behavior of chitosan/glycerolphosphate hydrogel, *Iranian Polymer Journal*, **2013**, 22, 785-790.

33. E. Khodaverdi, F.S. Tekie, S.A. Mohajeri, **F. Ganji**, G. Zohuri, F.Hadizadeh, Preparation and investigation of sustained drug delivery systems using an injectable thermosensitive in situ forming hydrogel composed of PLGA-PEG-PLGA, *AAPS Pharmaceutical Science and Technology*, **2012**, 13(2), 590-600.
34. E. Khodaverdi, F. Hadizadeh, F.S. Mirzazadeh Tekie, A. Jalali, S.A. Mohajeri, **F. Ganji**, Preparation and analysis of a sustained drug delivery system by PLGA-PEG-PLGA triblock copolymers, *Polymer Bulletin*, **2012**, 69, 429-438.
35. S.A. Shojaosadati, **F. Ganji**, B. Zahedi, H.A. Rafiee-pour, H. Ghourchian, Effect of different CNT's oxidation methods on thiocholine detection by surfactant modified graphite electrodes, *International Journal of Nanoscience and Nanotechnology*, **2010**, 6(4), 195-204.
36. **F. Ganji**, S. Vasheghani-Farahani, E. Vasheghani-Farahani, Theoretical description of hydrogel swelling; a review, *Iranian Polymer Journal*, **2010**, 19(5), 375-398.
37. N. Masoumi, D. Bastani, S. Najarian, **F. Ganji**, F. Farmanzad, A.S. Seddighi, "Mathematical modeling of CSF pulsatile hydrodynamics based on fluid-solid interaction", *IEEE Trans Biomedical Engineering*, **2010**, 57 (6), 1255-1263.
38. **F. Ganji**, E. Vasheghani-Farahani, "Hydrogels in controlled drug delivery systems", *Iranian Polymer Journal*, **2009**, 18(1), 63-88.
39. **F. Ganji**, M.J. Abdekhodaie, A. Ramazany, "Gelation time and degradation rate of chitosan as a thermosensitive injectable hydrogel", *Journal of Sol-Gel Science and Technology*, **2007**, 42:47-53.

7. MSc Thesis Supervisor

1. Design and optimization of fast-dissolving oral film formulation containing Flunixin.
2. Preparation and characterization of alendronate - hyaluronic acid nanoparticles as a bone targeted drug delivery system.
3. Preparation and characterization of bone/CD44-dual-targeting redox-responsive nanocarriers for bone metastasis treatment.
4. Formulation and in vitro evaluation of orally fast dissolving film and wafer for Prednisolone.
5. Synthesis and optimization of an injectable in situ alginate/silk/calcium silicate/ bisphosphonates hydrogel properties used in bone regeneration.
6. Synthesis and characterization of an injectable in situ alginate/bisphosphonate hydrogel for bone tissue regeneration.
7. Technical knowledge of making fast dissolving oral film based on hydroxypropylmethyl cellulose polymer.
8. Synthesis of hyaluronic acid based polymers for dual drug delivery to cancer cells.
9. Synthesis and characterization of an injectable in situ alginate/silk fibroin hydrogel containing alendronate and carboxylic acid functionalized single wall carbon nanotubes for bone tissue regeneration.
10. Design and optimization of fast-dissolving oral film formulation containing Praziquant.
11. preparation and properties optimization of Phenylephrine HCl and Dextromethorphan HBr oral fast dissolving films based on Hydroxypropyl methyl cellulose polymer.
12. Achieving the technical knowledge of sucrosomial oral iron formulation based on sucrester liposomes.
13. Preparation and evaluation of Midazolam HCL buccal mucoadhesive system with dual drug delivery properties.
14. Preparation of curcumin-sustained release system based on mesoporous silica nanoparticles embedded in smart chitosan hydrogel.
15. Study of encapsulation process effect on efficiency and function of Cinnamic acid and TBHQ antioxidants.
16. Controlled co-delivery of bone induction factors from chitosan nanoparticles embedded PCL nanofibers.
17. A study on the effect of hydrophobic polymers, Pullulan and Polyvinyl alcohol, on drug solubility and film properties of the oral films

18. Preparation of a sustained curcumin release system based on MSNs embedded in temperature sensitive chitosan hydrogel
19. Preparation of sustained release system based on chitosan/amino propyl triethoxysilane modified MSNs for Gallic acid
20. Preparation and evaluation of transdermal patches containing Rivastigmine-loaded biodegradable polymeric nanoparticles
21. Fabrication of electrospun polycaprolactone scaffolds containing Dexamethasone loaded chitosan microsphere for osteogenic differentiation of mesenchymal stem cells
22. Preparation and study of injectable thermosensitive chitosan/ β Gp/HPMC hydrogel
23. Preparation and study of injectable Metronidazole system based on thermosensitive chitosan hydrogel for periodontal diseases
24. Controlled release of pyridostigmine bromide from dispersed Eudragit nanoparticles embedded in chitosan thermosensitive hydrogel.
25. Preparation and investigation of insulin sustained release system based on the temperature-sensitive chitosan hydrogel.
26. Investigation the effect of skin enhancers on Desmopressin release behavior from transdermal drug delivery systems

8. PhD Thesis Supervisor

1. Design and Construction of a Core-Shell Microneedle System to Achieve Dual-Drug Release Pattern for Two Different Agents.
2. Design of smart bone-targeted drug delivery system for cancer therapy based on hyaluronic acid and aspartic acid oligopeptide.
3. Preparation and evaluation of oral fast dissolving film containing Midazolam nanoparticles.
4. Synthesis of hydrophobized cationic dextran for targeted anticancer delivery
5. Cephalexin delivery from transdermal patches containing lipid nanoparticles

9. Journal Reviewer

1. Material Science
2. Carbohydrate Polymers
3. Biological Macromolecules
4. Journal of Macromolecular Science
5. Journal of Applied Polymer Science
6. Nano Science and Nanotechnology
7. Pharmaceutic Development and Technology
8. International Journal of Biological Macromolecules
9. Journal of drug Delivery Science and Technology

References Available Upon Request