

## **CURRICULUM VITAE**

**Soodabeh Davaran**



### **PERSONAL DATA**

Date of Birth: December 18, 1965

Place of Birth: Tabriz -Iran

Nationality: Iranian

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## **POSITION**

Professor of polymer chemistry, Department of Medicinal Chemistry, Faculty of Pharmacy, Tabriz University of Medical Sciences, Tabriz, Iran.

Head of Nanomedicine Department, Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences

## **EDUCATION**

1991- 1996 Ph.D. in Polymer Chemistry - University of Tabriz, Thesis supervisor - Prof. Ali Akbar Entezami.

1989- 1991 B. Sc. in Organic Chemistry, University of Tabriz, Thesis supervisor- Prof. Seyyed Mohammad Bolourchian.

## **Awards and Honors**

- ▶ 2015 UNESCO Medal and Award for “Development of Nanosciences and Nanotechnologies”
- ▶ 2012 Selected as one of the "TOP 100 Scientists" (International Biographical Centre, Cambridge, England, UK).
- ▶ 2008 Selected as "2000 Outstanding Intellectuals of the 21th Century", (International Biographical Centre, Cambridge, England, UK).
- ▶ 2007 Awarded as "Women Elites of Iran and All Elites around the Islamic World".
- ▶ 2007 Awarded as "Distinguished Researchers of the East Azerbaijan Province".
- ▶ 2003 First Rank of "9<sup>th</sup> Razi Festival" in Basic Sciences.

► 2003 Awarded as the "Top researcher of Research Centers of Tabriz University of Medical Sciences".

► 2000 "Who's Who in Plastics and Polymers", First Edition, Society of Plastic Engineers, Technomic Publishing Company Inc, Lancaster, Pennsylvania, USA.

## **TEACHING EXPERIENCE**

Organic chemistry, polymer sciences, biomaterials, synthesis of organic compounds, nanomaterial, nanomedicine, nanobiosensors.

## **RESEARCH INTERESTS**

The principal research focus is Drug Delivery and Nanomedicine including:

**Smart polymers:** Synthesis and application in drug delivery systems.

**Biodegradable polymeric nanoparticles:** Synthesis and uses in diseases targeted drug delivery systems focus on cancer therapy and diagnosis.

**Novel nanobiomaterials:** synthesis and use in tissue engineering and regenerative medicine.

## **EDITORIAL DUTIES**

Editorial board of BioImpact, Tabriz University of Medical Sciences.

Editorial board of Pharmaceutical Sciences, Journal of Faculty of Pharmacy, Tabriz University of Medical Sciences.

Editorial board of Controlled Release Journal, The official journal of Controlled Release Society of Iran.

## PUBLICATIONS

### Books:

► A Handbook of Applied Biopolymer Technology: Synthesis, Degradation and Applications (RSC Green Chemistry), Chapter 13; Impacts of Biodegradable Polymers Towards Biomedical Applications, Royal Society of Chemistry; 1 edition (June 23, 2011).

► Advanced Nanoparticles and their Applications in Biomedical Sciences, Publications of Tabriz University of Medical Sciences

### Published papers

1. Jabbari, S., Ghamkhari, A., Javadzadeh, Y., Salehi, R. and Davaran, S., 2018. Doxorubicin and chrysin combination chemotherapy with novel pH-responsive poly [(lactide-co-glycolic acid)-block-methacrylic acid] nanoparticle. *Journal of Drug Delivery Science and Technology*, 46, pp.129-137
2. Salehiabar, M., Nosrati, H., Javani, E., Aliakbarzadeh, F., Manjili, H.K., Davaran, S. and Danafar, H., 2018. Production of biological nanoparticles from bovine serum albumin as controlled release carrier for curcumin delivery. *International journal of biological macromolecules*, 115, pp.83-89.
3. Davaran, S., Fazeli, H., Ghamkhari, A., Rahimi, F., Molavi, O., Anzabi, M. and Salehi, R., 2018. Synthesis and Characterization of Novel P (HEMA-LA-MADQUAT) micelles for co-delivery of Methotrexate and Chrysin in combination cancer chemotherapy. *Journal of Biomaterials Science, Polymer Edition*, 29(11), pp.1265-1286.
4. Salimi, F., Dilmaghani, K.A., Alizadeh, E., Akbarzadeh, A. and Davaran, S., 2018. Enhancing cisplatin delivery to hepatocellular carcinoma HepG2 cells using dual sensitive smart nanocomposite. *Artificial cells, nanomedicine, and biotechnology*, 46(5), pp.949-958.
5. Saghebasl, S., Davaran, S., Rahbarghazi, R., Montaseri, A., Salehi, R. and Ramazani, A., 2018. Synthesis and in vitro evaluation of thermosensitive hydrogel scaffolds based on (PNIPAAm-PCL-PEG-PCL-PNIPAAm)/Gelatin and (PCL-PEG-PCL)/Gelatin for use in cartilage tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, 29(10), pp.1185-1206.

6. Salehiabar, M., Nosrati, H., Davaran, S., Danafar, H. and Manjili, H.K., 2018. Facile synthesis and characterization of l-aspartic acid coated iron oxide magnetic nanoparticles (IONPs) for biomedical applications. *Drug research*, 68(05), pp.280-285.
7. Nosrati, H., Abbasi, R., Charmi, J., Rakhshbahar, A., Aliakbarzadeh, F., Danafar, H. and Davaran, S., 2018. Folic acid conjugated bovine serum albumin: An efficient smart and tumor targeted biomacromolecule for inhibition folate receptor positive cancer cells. *International journal of biological macromolecules*.
8. Nosrati, H., Salehiabar, M., Davaran, S., Danafar, H. and Manjili, H.K., 2018. Methotrexate-conjugated L-lysine coated iron oxide magnetic nanoparticles for inhibition of MCF-7 breast cancer cells. *Drug development and industrial pharmacy*, 44(6), pp.886-894.
9. Nosrati, H., Javani, E., Salehiabar, M., Manjili, H.K., Davaran, S. and Danafar, H., 2018. Biocompatibility and anticancer activity of L-phenyl alanine-coated iron oxide magnetic nanoparticles as potential chrysin delivery system. *Journal of Materials Research*, 33(11), pp.1602-1611.
10. Sadr, S.H., Davaran, S., Alizadeh, E., Salehi, R. and Ramazani, A., 2018. PLA-based magnetic nanoparticles armed with thermo/pH responsive polymers for combination cancer chemotherapy. *Journal of Drug Delivery Science and Technology*, 45, pp.240-254.
11. Nosrati, H., Salehiabar, M., Hamidreza Kheiri, M., Davaran, S. and Danafar, H., 2018. Theranostic nanoparticles based on magnetic nanoparticles: Design, preparation, characterization and evaluation as novel anticancer drug carrier and MRI contrast agent. *Drug development and industrial pharmacy*, (just-accepted), pp.1-29.
12. Rahmani Del Bakhshayesh, A., Annabi, N., Khalilov, R., Akbarzadeh, A., Samiei, M., Alizadeh, E., Alizadeh-Ghodsi, M., Davaran, S. and Montaseri, A., 2018. Recent advances on biomedical applications of scaffolds in wound healing and dermal tissue engineering. *Artificial cells, nanomedicine, and biotechnology*, 46(4), pp.691-705.
13. Asadi, N., Alizadeh, E., Salehi, R., Khalandi, B., Davaran, S. and Akbarzadeh, A., 2018. Nanocomposite hydrogels for cartilage tissue engineering: a review. *Artificial cells, nanomedicine, and biotechnology*, 46(3), pp.465-471.
14. Ranjbar-Navazi, Z., Eskandani, M., Johari-Ahar, M., Nemati, A., Akbari, H., Davaran, S. and Omid, Y., 2018. Doxorubicin-conjugated D-glucosamine- and folate-bi-functionalised InP/ZnS quantum dots for cancer cells imaging and therapy. *Journal of drug targeting*, 26(3), pp.267-277.

15. Farshbaf, M., Salehi, R., Annabi, N., Khalilov, R., Akbarzadeh, A. and Davaran, S., 2018. pH- and thermo-sensitive MTX-loaded magnetic nanocomposites: synthesis, characterization, and in vitro studies on A549 lung cancer cell and MR imaging. *Drug development and industrial pharmacy*, 44(3), pp.452-462.
16. Golchin, K., Golchin, J., Ghaderi, S., Alidadiani, N., Eslamkhah, S., Eslamkhah, M., Davaran, S. and Akbarzadeh, A., 2018. Gold nanoparticles applications: from artificial enzyme till drug delivery. *Artificial cells, nanomedicine, and biotechnology*, 46(2), pp.250-254.
17. Hosseini Sadr, S., Davaran, S., Alizadeh, E., Salehi, R. and Ramazani, A., 2018. Enhanced Anticancer Potency by thermo/pH-responsive PCL-based magnetic nanoparticles. *Journal of Biomaterials Science, Polymer Edition*, 29(3), pp.277-308.
18. Vahed, S.Z., Salehi, R., Davaran, S. and Sharifi, S., 2017. Liposome-based drug co-delivery systems in cancer cells. *Materials Science and Engineering: C*, 71, pp.1327-1341.
19. Nosrati, H., Salehiabar, M., Attari, E., Davaran, S., Danafar, H. and Manjili, H.K., 2018. Green and one-pot surface coating of iron oxide magnetic nanoparticles with natural amino acids and biocompatibility investigation. *Applied Organometallic Chemistry*, 32(2), p.e4069.
20. Nosrati, H., Salehiabar, M., Davaran, S., Ramazani, A., Manjili, H.K. and Danafar, H., 2017. New advances strategies for surface functionalization of iron oxide magnetic nanoparticles (IONPs). *Research on Chemical Intermediates*, 43(12), pp.7423-7442.
21. Danafar, H., Sharafi, A., Askarlou, S. and Manjili, H.K., 2017. Preparation and characterization of PEGylated iron oxide-gold nanoparticles for delivery of sulforaphane and curcumin. *Drug research*, 67(12), pp.698-704.
22. Danafar, H., Rostamizadeh, K., Davaran, S. and Hamidi, M., 2017. Drug-conjugated PLA-PEG-PLA copolymers: A novel approach for controlled delivery of hydrophilic drugs by micelle formation. *Pharmaceutical development and technology*, 22(8), pp.947-957.
23. Farshbaf, M., Davaran, S., Zarebkohan, A., Annabi, N., Akbarzadeh, A. and Salehi, R., 2017. Significant role of cationic polymers in drug delivery systems. *Artificial cells, nanomedicine, and biotechnology*, pp.1-20.
24. Danafar, H., Rostamizadeh, K., Davaran, S. and Hamidi, M., 2017. Co-delivery of hydrophilic and hydrophobic drugs by micelles: a new approach using drug conjugated PEG-PCL Nanoparticles. *Drug development and industrial pharmacy*, 43(11), pp.1908-1918.
25. Raeisdasteh Hokmabad, V., Davaran, S., Ramazani, A. and Salehi, R., 2017. Design and fabrication of porous biodegradable scaffolds: a strategy for tissue engineering. *Journal of Biomaterials Science, Polymer Edition*, 28(16), pp.1797-1825.

26. Nosrati, H., Salehiabar, M., Manjili, H.K., Danafar, H. and Davaran, S., 2017. Preparation of magnetic albumin nanoparticles via a simple and one-pot desolvation and co-precipitation method for medical and pharmaceutical applications. *International journal of biological macromolecules*.
27. Farshbaf, M., Davaran, S., Rahimi, F., Annabi, N., Salehi, R. and Akbarzadeh, A., 2017. Carbon quantum dots: recent progresses on synthesis, surface modification and applications. *Artificial cells, nanomedicine, and biotechnology*, pp.1-18.
28. Aberoumandi, S.M., Mohammadhosseini, M., Abasi, E., Saghati, S., Nikzamir, N., Akbarzadeh, A., Panahi, Y. and Davaran, S., 2017. An update on applications of nanostructured drug delivery systems in cancer therapy: a review. *Artificial cells, nanomedicine, and biotechnology*, 45(6), pp.1058-1068.
29. Karnoosh-Yamchi, J., Rahmati-Yamchi, M., Akbarzadeh, A., Davaran, S., Ostad Rahimi, A.R., Garnoosh, K., Bahmani, Z., Ashoori, M. and Mobasseri, M., 2017. pH sensitive insulin-loaded nanohydrogel increases the effect of oral insulin in diabetic rats. *Artificial cells, nanomedicine, and biotechnology*, 45(6), pp.1222-1226.
30. Shakoori, Z., Ghanbari, H., Omidi, Y., Pashaiasl, M., Akbarzadeh, A., Jomeh Farsangi, Z., Rezayat, S.M. and Davaran, S., 2017. Fluorescent multi-responsive cross-linked P (N-isopropylacrylamide)-based nanocomposites for cisplatin delivery. *Drug development and industrial pharmacy*, 43(8), pp.1283-1291.
31. Jahanban-Esfahlan, A., Davaran, S., Moosavi-Movahedi, A.A. and Dastmalchi, S., 2017. Investigating the interaction of juglone (5-hydroxy-1, 4-naphthoquinone) with serum albumins using spectroscopic and in silico methods. *Journal of the Iranian Chemical Society*, 14(7), pp.1527-1540.
32. Zijah, V., Salehi, R., Aghazadeh, M., Samiei, M., Alizadeh, E. and Davaran, S., 2017. Towards optimization of odonto/osteogenic bioengineering: in vitro comparison of simvastatin, sodium fluoride, melanocyte-stimulating hormone. *In Vitro Cellular & Developmental Biology-Animal*, 53(6), pp.502-512.
33. Panahi, F.H., Peighambaroust, S.J., Davaran, S. and Salehi, R., 2017. Development and characterization of PLA-mPEG copolymer containing iron nanoparticle-coated carbon nanotubes for controlled delivery of Docetaxel. *Polymer*, 117, pp.117-131.
34. Izadi, E., Rasooli, A., Akbarzadeh, A. and Davaran, S., 2017. Preparation and Characterization of Gold Nanoparticles in the Presence of Citrate and Soybean Seed Extract in an Acidic Conditions. *Drug research*, 67(05), pp.266-270.
35. Motaali, S., Pashaeiasl, M., Akbarzadeh, A. and Davaran, S., 2017. Synthesis and characterization of smart N-isopropylacrylamide-based magnetic nanocomposites containing doxorubicin anti-cancer drug. *Artificial cells, nanomedicine, and biotechnology*, 45(3), pp.560-567.

36. Gorjikhah, F., Azizi Jalalian, F., Salehi, R., Panahi, Y., Hasanzadeh, A., Alizadeh, E., Akbarzadeh, A. and Davaran, S., 2017. Preparation and characterization of PLGA- $\beta$ -CD polymeric nanoparticles containing methotrexate and evaluation of their effects on T47D cell line. *Artificial cells, nanomedicine, and biotechnology*, 45(3), pp.432-440.
37. Asghari, F., Samiei, M., Adibkia, K., Akbarzadeh, A. and Davaran, S., 2017. Biodegradable and biocompatible polymers for tissue engineering application: a review. *Artificial cells, nanomedicine, and biotechnology*, 45(2), pp.185-192.
38. Davaran, S., Ghamkhari, A., Alizadeh, E., Massoumi, B. and Jaymand, M., 2017. Novel dual stimuli-responsive ABC triblock copolymer: RAFT synthesis, "schizophrenic" micellization, and its performance as an anticancer drug delivery nanosystem. *Journal of colloid and interface science*, 488, pp.282-293.
39. Vahed, S.Z., Salehi, R., Davaran, S. and Sharifi, S., 2017. Liposome-based drug co-delivery systems in cancer cells. *Materials Science and Engineering: C*, 71, pp.1327-1341.
40. Khalandi, B., Asadi, N., Milani, M., Davaran, S., Abadi, A.J.N., Abasi, E. and Akbarzadeh, A., 2017. A review on potential role of silver nanoparticles and possible mechanisms of their actions on bacteria. *Drug research*, 67(02), pp.70-76.
41. Asadi, N., Davaran, S., Panahi, Y., Hasanzadeh, A., Malakootikhah, J., Fallah Moafi, H. and Akbarzadeh, A., 2017. Application of nanostructured drug delivery systems in immunotherapy of cancer: a review. *Artificial cells, nanomedicine, and biotechnology*, 45(1), pp.18-23.
42. Shabestari Khiabani, S., Farshbaf, M., Akbarzadeh, A. and Davaran, S., 2017. Magnetic nanoparticles: preparation methods, applications in cancer diagnosis and cancer therapy. *Artificial cells, nanomedicine, and biotechnology*, 45(1), pp.6-17.
43. Fathi Karkan, S., Mohammadhosseini, M., Panahi, Y., Milani, M., Zarghami, N., Akbarzadeh, A., Abasi, E., Hosseini, A. and Davaran, S., 2017. Magnetic nanoparticles in cancer diagnosis and treatment: a review. *Artificial cells, nanomedicine, and biotechnology*, 45(1), pp.1-5.
44. Bakhtiari, M., Salehi, R., Akbarzadeh, A. and Davaran, S., 2017. Development of Novel Doxorubicin Loaded Biodegradable Polymeric Nanofibers as the Anticancer Drug Delivery Systems. *BioNanoScience*, pp.1-7.
45. Rafi, A.A., Mahkam, M., Davaran, S. and Hamishehkar, H., 2016. A smart pH-responsive nano-carrier as a drug delivery system: a hybrid system comprised of mesoporous nanosilica MCM-41 (as a nano-container) & a pH-sensitive polymer (as smart reversible gatekeepers): preparation, characterization and in vitro release studies of an anti-cancer drug. *European Journal of Pharmaceutical Sciences*, 93, pp.64-73.



46. Gorjikhah, F., Davaran, S., Salehi, R., Bakhtiari, M., Hasanzadeh, A., Panahi, Y., Emamverdy, M. and Akbarzadeh, A., 2016. Improving “lab-on-a-chip” techniques using biomedical nanotechnology: a review. *Artificial cells, nanomedicine, and biotechnology*, 44(7), pp.1609-1614.
47. Jahanban-Esfahlan, A., Dastmalchi, S. and Davaran, S., 2016. A simple improved desolvation method for the rapid preparation of albumin nanoparticles. *International journal of biological macromolecules*, 91, pp.703-709.
48. Asghari, F., Salehi, R., Agazadeh, M., Alizadeh, E., Adibkia, K., Samiei, M., Akbarzadeh, A., Aval, N.A. and Davaran, S., 2016. The odontogenic differentiation of human dental pulp stem cells on hydroxyapatite-coated biodegradable nanofibrous scaffolds. *International Journal of Polymeric Materials and Polymeric Biomaterials*, 65(14), pp.720-728.
49. Samiei, M., Aghazadeh, M., Alizadeh, E., Aslaminabadi, N., Davaran, S., Shirazi, S., Ashrafi, F. and Salehi, R., 2016. Osteogenic/odontogenic bioengineering with co-administration of simvastatin and hydroxyapatite on poly caprolactone based nanofibrous scaffold. *Advanced pharmaceutical bulletin*, 6(3), p.353.
50. Navazi, Z.R., Nemati, A., Akbari, H. and Davaran, S., 2016. The Effect of Fatty Amine Chain Length on Synthesis Process of Inp/Zns Quantum Dots. *Oriental Journal of Chemistry*, 32(4), pp.2163-2169.
51. Babaei, S., Ghanbarzadeh, S., Adib, Z.M., Kouhsoltani, M., Davaran, S. and Hamishehkar, H., 2016. Enhanced skin penetration of lidocaine through encapsulation into nanoethosomes and nanostructured lipid carriers: a comparative study. *Die Pharmazie-An International Journal of Pharmaceutical Sciences*, 71(5), pp.247-251.
52. Kurd, K., Khandagi, A.A., Davaran, S. and Akbarzadeh, A., 2016. Cisplatin release from dual-responsive magnetic nanocomposites. *Artificial cells, nanomedicine, and biotechnology*, 44(3), pp.1031-1039.
53. Alidadiyani, N., Salehi, R., Ghaderi, S., Samadi, N. and Davaran, S., 2016. Synergistic antiproliferative effects of methotrexate-loaded smart silica nanocomposites in MDA-MB-231 breast cancer cells. *Artificial cells, nanomedicine, and biotechnology*, 44(2), pp.603-609.
54. Ebrahimi, E., Khandaghi, A.A., Valipour, F., Babaie, S., Asghari, F., Motaali, S., Abbasi, E., Akbarzadeh, A. and Davaran, S., 2016. In vitro study and characterization of doxorubicin-loaded magnetic nanoparticles modified with biodegradable copolymers. *Artificial cells, nanomedicine, and biotechnology*, 44(2), pp.550-558.
55. Valizadeh, A., Bakhtiary, M., Akbarzadeh, A., Salehi, R., Frakhani, S.M., Ebrahimi, O., Rahmati-yamchi, M. and Davaran, S., 2016. Preparation and characterization of novel electrospun poly ( $\epsilon$ -caprolactone)-based nanofibrous scaffolds. *Artificial cells, nanomedicine, and biotechnology*, 44(2), pp.504-509.

56. Johari-Ahar, M., Barar, J., Alizadeh, A.M., Davaran, S., Omidi, Y. and Rashidi, M.R., 2016. Methotrexate-conjugated quantum dots: synthesis, characterisation and cytotoxicity in drug resistant cancer cells. *Journal of drug targeting*, 24(2), pp.120-133.
57. Nasrabadi, H.T., Abbasi, E., Davaran, S., Kouhi, M. and Akbarzadeh, A., 2016. Bimetallic nanoparticles: Preparation, properties, and biomedical applications. *Artificial cells, nanomedicine, and biotechnology*, 44(1), pp.376-380.
58. Payab, S., Davaran, S., Tanhaei, A., Fayyazi, B., Jahangiri, A., Farzaneh, A. and Adibkia, K., 2016. Triamcinolone acetonide–Eudragit® RS100 nanofibers and nanobeads: Morphological and physicochemical characterization. *Artificial cells, nanomedicine, and biotechnology*, 44(1), pp.362-369.
59. Ebrahimi, E., Akbarzadeh, A., Abbasi, E., Khandaghi, A.A., Abasalizadeh, F. and Davaran, S., 2016. Novel drug delivery system based on doxorubicin-encapsulated magnetic nanoparticles modified with PLGA-PEG1000 copolymer. *Artificial cells, nanomedicine, and biotechnology*, 44(1), pp.290-297.
60. Chung, J.H., Kim, Y.K., Kim, K.H., Kwon, T.Y., Vaezmomeni, S.Z., Samiei, M., Aghazadeh, M., Davaran, S., Mahkam, M., Asadi, G. and Akbarzadeh, A., 2016. Synthesis, characterization, biocompatibility of hydroxyapatite–natural polymers nanocomposites for dentistry applications. *Artificial cells, nanomedicine, and biotechnology*, 44(1), pp.277-284.
61. Gharatape, A., Milani, M., Rasta, S.H., Pourhassan-Moghaddam, M., Ahmadi-Kandjani, S., Davaran, S. and Salehi, R., 2016. A novel strategy for low level laser-induced plasmonic photothermal therapy: the efficient bactericidal effect of biocompatible AuNPs@(PNIPAAm-co-PDMAEMA, PLGA and chitosan). *RSC Advances*, 6(112), pp.110499-110510.
62. Gharatape, A., Davaran, S., Salehi, R. and Hamishehkar, H., 2016. Engineered gold nanoparticles for photothermal cancer therapy and bacteria killing. *RSC Advances*, 6(112), pp.111482-111516.
63. Zarouni, M., Salehi, R., Akbarzadeh, A., Samadi, N., Davaran, S., Ramezani, F. and Dariushnejad, H., 2015. Biocompatible polymer coated paramagnetic nanoparticles for doxorubicin delivery: synthesis and anticancer effects against human breast cancer cells. *International Journal of Polymeric Materials and Polymeric Biomaterials*, 64(14), pp.718-726.
64. Fard, J.K., Jafari, S. and Eghbal, M.A., 2015. A review of molecular mechanisms involved in toxicity of nanoparticles. *Advanced pharmaceutical bulletin*, 5(4), p.447.
65. Babaie, S., Ghanbarzadeh, S., Davaran, S., Kouhsoltani, M. and Hamishehkar, H., 2015. Nanoethosomes for dermal delivery of lidocaine. *Advanced pharmaceutical bulletin*, 5(4), p.549.

66. Mamaghani, P.Y., Kaffashi, B., Salehi, R. and Davaran, S., 2015. Synthesis, characterization, and viscoelastic behavior of thermothickening poly (N-isopropylacrylamide-methacrylicacide-vinylpyrrolidone) nanogels as an injectable biocompatible drug carrier. *International Journal of Polymeric Materials and Polymeric Biomaterials*, 64(2), pp.55-63.
67. Davaran, S., Lotfipour, F., Sedghipour, N., Sedghipour, M.R., Alimohammadi, S. and Salehi, R., 2015. Preparation and in vivo evaluation of in situ gel system as dual thermo-/pH-responsive nanocarriers for sustained ocular drug delivery. *Journal of microencapsulation*, 32(5), pp.511-519.
68. Kafie Masule, S.M., Nasiri, M., Davaran, M. and Davaran, S.H., 2015. The Relationship Between Defensive Styles with a Body Dymorphic Disorder in Female Students in Guilan, Northern Iran. *Journal of Guilan University of Medical Sciences*, 24(93), pp.31-38.
69. Ebrahiminezhad, A., Rasoul-Amini, S., Kouhpayeh, A., Davaran, S., Barar, J. and Ghasemi, Y., 2015. Impacts of amine functionalized iron oxide nanoparticles on HepG2 cell line. *Current Nanoscience*, 11(1), pp.113-119.
70. Tabibiazar, M., Davaran, S., Hashemi, M., Homayonirad, A., Rasoulzadeh, F., Hamishehkar, H. and Mohammadifar, M.A., 2015. Design and fabrication of a food-grade albumin-stabilized nanoemulsion. *Food Hydrocolloids*, 44, pp.220-228.
71. Ghasemi, S., Ghanbarzadeh, S., Mozaffari, S. and Davaran, S., 2015. Improved anticancer effect of L-778,123, a Farnesyl-transferase inhibitor: Use of PEGylated Fe<sub>3</sub>O<sub>4</sub> nanoparticles.
72. Danafar, H., Davaran, S., Rostamizadeh, K., Valizadeh, H. and Hamidi, M., 2014. Biodegradable m-PEG/PCL core-shell micelles: preparation and characterization as a sustained release formulation for curcumin. *Advanced pharmaceutical bulletin*, 4(Suppl 2), p.501.
73. Jahangiri, A., Davaran, S., Fayyazi, B., Tanhaei, A., Payab, S. and Adibkia, K., 2014. Application of electrospraying as a one-step method for the fabrication of triamcinolone acetonide-PLGA nanofibers and nanobeads. *Colloids and Surfaces B: Biointerfaces*, 123, pp.219-224.
74. Nejati, K., Davaran, S. and Baggalzadeh, R., 2014. Synthesis and investigation of magnetic nanocomposite of Fe<sub>3</sub>O<sub>4</sub> with cetirizine-intercalated layered double hydroxide. *Superlattices and Microstructures*, 75, pp.257-267.
75. Salehi, R., Aghazadeh, M., Rashidi, M.R., Samadi, N., Salehi, S., Davaran, S. and Samiei, M., 2014. Bioengineering of dental pulp stem cells in a microporous PNIPAAm-PLGA scaffold. *International Journal of Polymeric Materials and Polymeric Biomaterials*, 63(15), pp.767-776.
76. Karnoosh-Yamchi, J., Mobasser, M., Akbarzadeh, A., Davaran, S., Ostad-Rahimi, A.R., Hamishehkar, H., Salehi, R., Bahmani, Z., Nejati-Koshki, K., Darbin, A. and Rahmati-Yamchi, M., 2014. Preparation of pH sensitive

- insulin-loaded Nano hydrogels and evaluation of insulin releasing in different pH conditions. *Molecular biology reports*, 41(10), pp.6705-6712.
77. Danafar, H., Rostamizadeh, K., Davaran, S. and Hamidi, M., 2014. PLA-PEG-PLA copolymer-based polymersomes as nanocarriers for delivery of hydrophilic and hydrophobic drugs: preparation and evaluation with atorvastatin and lisinopril. *Drug development and industrial pharmacy*, 40(10), pp.1411-1420.
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  79. Salehi, R., Irani, M., Eskandani, M., Nowruzi, K., Davaran, S. and Haririan, I., 2014. Interaction, controlled release, and antitumor activity of doxorubicin hydrochloride from pH-sensitive P (NIPAAm-MAA-VP) nanofibrous scaffolds prepared by green electrospinning. *International Journal of Polymeric Materials and Polymeric Biomaterials*, 63(12), pp.609-619.
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  81. Salehi, R., Hamishehkar, H., Eskandani, M., Mahkam, M. and Davaran, S., 2014. Development of dual responsive nanocomposite for simultaneous delivery of anticancer drugs. *Journal of drug targeting*, 22(4), pp.327-342.
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## **Selected National Presentations**

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### **Patents**

Preparation of smart nanoparticles for drug delivery

Preparation of nanoparticles for oral delivery of insulin

Preparation of transdermal patches with novel permeation enhancers

Preparation of nicotine transdermal patches

Preparation of aryl bis oxazoline catalysts for synthesis of chiral compounds

Production of Erlotenib ( a potent anti cancer drug)

Prolonged action drug delivery systems for narcotic addiction treatment

Preparation of sustained release naltrexone delivery systems for use in narcotic addiction

Preparation of modified magnetic nanoparticles containing doxorubicin used for treatment of lung cancer

