#### **CURRICULUM VITAE**



Name: Roya Salehi

**Position:** Associate professor in Pharmaceutical Nanotechnology

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## **Honors**

1. Award of the Top national researcher of Ministry of Health, 2013.

- 2. Award of the first top PhD thesis of Tabriz University of Medical Sciences, Tabriz, Iran (Synthesis, characterization and application of nanostructural polymeric scaffolds for drug delivery and tissue engineering), 2014.
- 3. Award of the first top researcher of Faculty of Advanced medical science in Tabriz University of Medical Sciences Research Festival.2016
- 4. Award of the third Top national project (preparation of naltrexone sustained released delivery systems for treatment of narcotic addiction, 2014)

### **Teaching experiences**

- **1. Fundamentals of Chemistry** (BSc of Chemistey). 2008 and 2009. Payame Noor University. Shahin-Dezh, West. Azerbaijan
- **2. Nanobiomedicine I (MSc of Medical Nanotechnology).** 2014-2016. Tabriz University of Medical Sciences. School of advanced medical science
- **3. Nanobiomedicine II (MSc of Medical Nanotechnology).** 2015-2016. Tabriz University of Medical Sciences. School of advanced medical science
- **4.** Nanomaterials and nanostructures (MSc of Medical Nanotechnology). 2018. Tabriz University of Medical Sciences. School of advanced medical science
- **5. Nanostructures fabrication method (MSc of Medical Nanotechnology).** 2018. Tabriz University of Medical Sciences. School of advanced medical science
- **6. Material Design and Nanostructure (PhD of Medical Nanotechnology).** 2017-2018. Tabriz University of Medical Sciences. School of advanced medical science
- **7.Nanostructures application in tissue engineering.** 2016-2017 and 2018. Tabriz University of Medical Sciences. School of advanced medical science

## Research experiences

- 1. Nanocarriers, polymers and hydrogels synthesis and application in drug delivery and imaging
- 2. Scaffold preparation and application in tissue engineering

# Papers in international journals

- **1. R. Salehi,** N. Arsalani, S. Davaran, A. A. Entezami\*, Synthesis and Characterization of Thermosensitive and pH-sensitive poly (N-isopropylacrylamide-acrylamide-vinylpyrrolidone) for use in controlled release of Naltrexone, Journal of Biomedical Materials Research part (A),2009,89A(4),919-928. **(First Author) (ISI indexed)**
- 2. **R. Salehi**, K. Nowruzi, A. A. Entezami, V. Asgharzadeh and S. Davaran\*, Thermosensitive polylactide-glycolide delivery systems for treatment of narcotic addictions, Journal of Polymers for Advanced Technologies.2009,20,416–422. (First Author) (ISI indexed)
- **3. R. Salehi**, S. Davaran, M. R. Rashidi, A. A. Entezami\*, Thermosensitive Nanoparticles Prepared from Poly (N-isopropylacrylamide-acrylamide-vinylpyrrolidone) and its blend with poly (lactide-co-glycolide) for Efficient Drug Delivery System, Journal of Applied Polymer Science. Vol. 111, 1905–1910 (2009). **(First Author) (ISI indexed)**
- 4. S. Davaran, D. Asgari, M. R. Rashidi, **R. Salehi**, Y. Omidi\*, Synthesis, characterization and drug release behavior of a novel PEGylated BSA as a carrier for tumor-targeted anticancer agents, Journal of Applied Polymer Science.2011,119,2635-2643. **(ISI indexed)**
- 5. Omid Mashinchian, **Roya Salehi**, Gholamreza Dehghan, Ayoub Aganejad ,Soudabeh Davaran\* and Yadollah Omidi\*\*, Novel thermosensitive poly (N-isopropylacrylamide-co-vinylpyrrolidone-co-methacrylic acid) nanosystems for delivery of natural products, International Journal of Drug Delivery.2010,2(4),278-286.
- 6. Somayyeh Alimohammadi, **Roya Salehi**, Niloofar Amini, Soodabeh Davaran\*, Synthesis and Physicochemical Characterization of Biodegradable PLGA-based Magnetic Nanoparticles Containing Amoxicilin. Bull. Korean Chem. Soc. 2012, Vol. 33, No. 10, 3225-3232. **(ISI indexed)**
- **7. Roya salehi**, keyvan Nowruzi, Shahram Salehi, Soodabeh Davaran\*, Ali Akbar Entezami, Smart Poly (N-isopropylacrylamide)-block-Poly(L-lactide) Nanoparticles for Prolonged-Release of Naltrexone, . International Journal of Polymeric Materials and Biomaterials.2013; 62: 686–694. **(First Author) (ISI indexed)**
- **8. Roya Salehi**, Mohammad Irani, Mohammad-Reza Rashidi, Abdolreza Aroujalian, Ahmadreza Raisi, Morteza Eskandani, Ismaeil Haririan\* and Soudabeh Davaran\*\*, Stimuli-responsive nanofibers prepared from poly(N-isopropylacrylamide-acrylamidevinylpyrrolidone) by electrospinning as an anticancer drug delivery. Designed of Monomers and Polymers, 2013, Vol. 16, No. 6, 515–527. (First Author) (ISI indexed)
- **9. Roya Salehi**, Mohammad Irani, Mortaza Eskandani, Keyvan Nowruzi, Soodabeh Davaran\*, Ismaeil Haririan. Interaction, Controlled Release and Antitumor Activity of Doxorubicin hydrochloride from pH-Sensitive P(NIPAAm-MAA-VP) Nanofibrous Scaffolds prepared by Green electroespining, International Journal of Polymeric Materials and Biomaterials.2014, 63,609–619. (First Author) (ISI indexed)

- 10. Ramin Heidarpour\*, Somayeh Alimohammadi, **Roya Salehi**, Salar Hemmati, Saeed Taghvaei-Ganjali. Synthesis and characterization of novel biocompatible four-arm star-shaped copolymers by using of a new tetramethacrylate core. Fibers and Polymers. 2014, Vol.15, No.3, 465-471. **(ISI indexed)**
- 11. S. Rasouli, S. Davaran, F. Rasouli, M. Mahkam\*, R. Salehi \*\*, Synthesis, Characterization, and pH-Controllable Methotrexate Release from Biocompatible Polymer/Silica Nanocomposite for anticancer Drug Delivery, Drug delivery. 2014; 21(3): 155–163. (Corresponding author) (ISI indexed)
- 12. S. Rasouli, S. Davaran, F. Rasouli, M. Mahkam\*and **R. Saleh**i\*\*, Positively Charged Functionalized silica Nanoparticles as biocompatible carriers for Triggered Anticancer Drug Release, Designed Monomers and Polymers. 2014, Vol. 17, No. 3, 227–237. (Corresponding author) (ISI indexed)
- **13. Roya Salehi**, Hamed Hamishehkar\*, Morteza Eskandani, Mehrdad Mahkam, and Soodabeh Davaran\*\*, Development of dual responsive nanocomposite for simultaneous delivery of anticancer drugs, Journal of Drug Targeting, 2014; 22(4): 327–342. **(First Author) (ISI indexed)**
- **14. R. Salehi**, M. Agazadeh, M.R. Rashidi , Sh. Salehi, S. Davaran and M. Samiee\*, Bioengineering of Dental Pulp Stem Cells in a Micro porous PNIPAAm-PLGA Scaffold, International Journal of Polymeric Materials and Biomaterials.2014; 63: 767–776. **(First Author) (ISI indexed)**
- 15. Fahimeh Farshi Azhar, Ali Olad, **Roya Salehi**. Fabrication and characterization of chitosan-gelatin/nanohydroxyapatite-polyaniline composite with potential application in tissue engineering scaffolds, Designed Monomers and Polymers, 2014; Vol. 17, No. 7, 654–667. (ISI indexed)
- 16. P. Yazdi, B. Kaffashi, **R. Salehi\*** and S. Davaran, Synthesis, characterization and Viscoelastic behavior of thermothickening Poly (Nisopropylacrylamide-methacrylicacide-vinylpyrrolidone) as an injectable anti-cancer drug carrier, International Journal of Polymeric Materials and Biomaterials, 2015; 64: 55–63. (Corresponding author) (ISI indexed)
- 17. Alidadiyani N, **Salehi R**, Ghaderi S, Samadi N\* and Davaran S\*\*. Synergistic Antiprolifrative Effects of Methotrexate-loaded Smart Silica Nanocomposite in MDA-MB-231 Breast Cancer Cells. Artifi cial Cells, Nanomedicine, and Biotechnology, 2016;44(2):603-9 **(ISI indexed)**
- 18. Mina Zarouni, **Roya salehi**, Abolfazl Akbarzadeh, Nasser samadi\*, Soodabeh Davaran\*, Fatemeh Ramezani, Hassan Dariushnejad. Biocompatible Polymer Coated paramagnetic Nanoparticles for Doxorubicin Delivery: Synthesis and Anticancer Effects against Human Breast Cancer Cells. International Journal of Polymeric Materials. 2014 **(ISI indexed)**

- 19. Alireza Valizadeh, Mohsen Bakhtiary, Abolfazl Akbarzadeh, **Roya Salehi**, Samad Mussa Frakhani, Ommolbanin Ebrahimi, Mohammad Rahmati-yamchi& Soodabeh Davaran. Preparation and characterization of novel electrospun poly (e-caprolactone)-based nanofibrous scaffolds. Artificial Cells, Nanomedicine, and Biotechnology, 2016;44(2):504-9 (ISI indexed)
- 20. Monir Moradzadeh Khiavi, Ahamd Rostami, Hamed Hamishekar, Mehran Mesgari Abassi, Amirala Aghbali, **Roya Salehi**, Bita Abdollahi, Soheila Fotoohi, Mahmud Sina\*. Therapeutic Efficacy of Orally Delivered Doxorubicin Nanoparticles in Rat Tongue Cancer Induced by 4-Nitroquinoline 1-Oxide. Adv Pharm Bull, 2015, 5(2), 209-216 (ISI indexed)
- 21. Karnoosh-Yamchi Jalil, Mobasseri Majid, Akbarzadeh Abulfazl, Davaran Soodabe,Ostad-Rahimi Ali Reza, Hamishehkar Hamed, **Salehi Roya**, Bahmani Zahra, Nejati-Koshki Kazem and Rahmati-Yamchi Mohammad \*. Preparation of pH sensitive insulin-loaded nano hydrogels and evaluation of insulin releasing in different pH conditions. Mol Biol Rep, 2014. **(ISI indexed)**
- 22. Mortaza Taheri Anganeh, Fatemeh Sadat Tabatabaei Mirakabad, Mahmoud Izadi, Vahideh Zeighamian, Fariba Badrzadeh, **Roya Salehi**, Nosratollah Zarghami, Masoud Darabi, Abolfazl Akbarzadeh, Mohammad Rahmati-Yamchi\*. The comparison between effects of free curcumin and curcumin loaded PLGA-PEG on telomerase and TRF1 expressions in calu-6 lung cancer cell line. International Journal of Biosciences | IJB | . 2014; 4(10):134-145.
- 23. **Roya Salehi**, Sepideh Rasouli, Hamed Hamishehkar\*. Smart Thermo/pH responsive magnetic nanogels as dual drug delivery system for the simultaneous delivery of Doxorubicin and Methotrexate. International Journal of Pharmaceutics (IJP). 2015; 487(1-2):274-284. **(First Author) (ISI indexed)**
- 24. Vahideh Zeighamian, Masoud Darabi, Abolfazl Akbarzadeh, Mohammad Rahmati-Yamchi, Nosratollah Zarghami, Fariba Badrzadeh, **Roya Salehi**, Fatemeh Sadat Tabatabaei Mirakabad & Mortaza Taheri-Anganeh. PNIPAAm-MAA nanoparticles as delivery vehicles for curcumin against MCF-7 breast cancer cells. Artificial Cells, Nanomedicine, and Biotechnology, 2016;44(2):735-42 (ISI indexed)
- 25. Soodabeh Davaran, Leila Alizadeh Ghavidel, Farzaneh Lotfipoor, Naghmeh Sedghipour, Mohamad Reza Sedghipour, Yousef Javadzadeh, **Roya Salehi\***, Preparation and in-vivo evaluation of in situ gel system as dual thermo/pH-responsive nanocarriers for sustained ocular drug delivery, Journal of Microencapsulation. 2015; 32(5): 511–519 (Corresponding author) (ISI indexed)
- 26. Shiva Askari, **Roya Salehi**, Nosratallah Zarghami, Abolfazl Akbarzadeh, Mohammad Rahmati-yamchi\*. The Anticancer effects of Biodegradable Nanomagnetic Dual Natural Components on the Leptin Gene Expression in Lung Cancer. Artificial Cells, Nanomedicine, and Biotechnology, 2016 Nov; 44(7):1753-63 (ISI indexed)
- 27. Seyyedeh Leila Hosseinipour, Mahmoud Sowti Khiabani , Hamed Hamishehkar\* and **Roya Salehi\*.** Enhanced stability and catalytic activity of immobilized 1  $\alpha$ -amylase on

modified Fe3O4 nanoparticles for potential application in foodindustries. Journal of Nanoparticle Research (NANO). J Nanopart Res (2015) 17:382 (Corresponding author) (ISI indexed)

- 28. Hamed Hamishehkar, Bahar Ghasemzadeh, Abdolhossein Naseri, **Roya Salehi**, Farzaneh Rasoulzadeh. Carbon dots preparation as a fluorescent sensing platform for highly efficient detection of Fe(III) ions in biological systems. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 150 (2015) 934–939. **(ISI indexed)**
- 29. Zarrin Ghasemi, Farzaneh Farshbaf Orafa, Mahtab Pirouzmand, Gholamreza Zarrini, Behnaz Nikzad Kojanag, **Roya Salehi**. Zn2+/MCM-41 catalyzed Biginelli reaction of heteroaryl aldehydes and evaluation of the antimicrobial activity and cytotoxicity of the pyrimidone products. Tetrahedron Letters 56 (2015) 6393–6396. **(ISI indexed)**
- 30. Fatemeh Bazmi zeynabad, **Roya Salehi**\*, Effat Alizadeh, Hossein Samadi Kafil, Azad Mohammad Hassanzadeh and Mehrdad Mahkam. pH-Controlled multiple-drug delivery by a novel antibacterial nanocomposite for combination therapy. RSC Adv., 2015, 5, 105678 (Corresponding author) (ISI indexed)
- 31. Fatemeh Gorjikhah, Soodabeh Davaran, **Roya Salehi**, Mohsen Bakhtiari, Arash Hasanzadeh, Yunes Panahi, Masumeh Emamverdy & Abolfazl Akbarzadeh. Improving "lab-on-a-chip" techniques using biomedical nanotechnology: a review. Artificial Cells, Nanomedicine, and Biotechnology, 2016,44(7):1609-14 **(ISI indexed)**
- 32. Fatemeh Gorjikhah, Farid Azizi Jalalian, **Roya Salehi**, Yunes Panahi, Arash Hasanzadeh, Effat Alizadeh, Abolfazl Akbarzadeh & Soodabeh Davaran. Preparation and characterization of PLGA-β-CD polymeric nanoparticles containing methotrexate and evaluation of their effects on T47D cell line. Artificial Cells, Nanomedicine, and Biotechnology. 2017, 45(3), 432–440 **(ISI indexed)**.
- 33. Fatemeh Asghari, **Roya Salehi**, Marziyeh Agazadeh, Effat Alizadeh, Khosro Adibkia, Mohammad Samiei, Abolfazl Akbarzadeh, Negar Abbasi Aval and Soodabeh Davaran\*. The Odontogenic Differentiation of Human Dental Pulp Stem Cells on Hydroxyapatite-coated Biodegradable Nanofibrous Scaffolds. International Journal of Polymeric Materials. 2016, 65(14),720-728 **(ISI indexed).**
- 34. Mohammad Samiei, Marziyeh Aghazadeh, Effat Alizadeh, Naser Aslaminabadi, Soodabeh Davaran, Sajjad Shirazi, Farhad Ashrafi1, **Roya Salehi\***. Osteogenic/Odontogenic Bioengineering with co-Administration of Simvastatin and Hydroxyapatite on poly Caprolactone based Nanofibrous Scaffold. Adv Pharm Bull. 2016, 6(3):353-365. (Corresponding author) (ISI indexed).
- 35. Vali Ahmadi, Jalil Karnoosh-Yamchi, Akbar Aliasgharzadeh, Alireza Ostad-Rahimi, Zeinab Nikniaz, **Roya Salehi**, Majid Mobasseri\*. The Effect of Nanohydrogel Oral Insulin Therapy on Serum Glucose and Insulin Level in Patients with Type 2 Diabetes: A Pilot Study. Pharmaceutical Sciences. 2016, 22, 181-185 (ISI indexed).

- 36. Behnaz Banimohamad Shotorbani, Effat Alizadeh, **Roya Salehi**, Abolfazl Barzegar. Adhesion of mesenchymal stem cells to biomimetic polymers: A review. Materials Science and Engineering: C. C 71 (2017) 1192–1200 (**ISI indexed**).
- 37. Elham Zakerzadeh, **Roya Salehi**\*, Effat Alizadeh, Hossein Samadi Kafil, Azad Mohammad Hassanzadeh and Mehrdad Mahkam. Novel Antibacterial Nanocomposite for Smart Co-Delivery of Anticancer Drugs. Artificial Cells, Nanomedicine, and Biotechnology, 2017, 45(8), 1509–1520 (Corresponding author) (ISI indexed).
- 38. Alireza Gharatape, Morteza Milani, Seyed Hossein Rasta, Mohammad Pourhassan-Moghaddam, Sohrab Ahmadi-Kandjani, Soodabeh Davaran and **Roya Salehi\***. A novel strategy for low level laser-induced plasmonic photothermal therapy: the efficient bactericidal effect of biocompatible AuNPs@(PDMAEMA-co-PNIPAAM, PLGA and Chitosan). RSC Adv., 2016, 6, 110499-110510 (Corresponding author) (ISI indexed).
- 39. Alireza Gharatape, Soodabeh Davaran, **Roya Salehi\*** and Hamed Hamishehkar Engineered gold nanoparticles for photothermal cancer therapy and bacteria killing. RSC Adv., 2016,6, 111482-111516 (**Corresponding author**) (**ISI indexed**).
- 40. Sepideh Zununi Vahed, **Roya Salehi**, Soodabeh Davaran, Simin Sharifi. Liposome-based drug co-delivery systems in cancer cells. Materials Science & Engineering C, Volume 71, 1 February 2017, Pages 1327–1341 (ISI indexed).
- 41. Mahdi Rahimi, Salman Shojaei, Kazem D. Safa, Zarrin Ghasemi, **Roya Salehi**, Bahman Yousefi and Vahid Shafiei-Irannejad\*. Biocompatible magnetic tris(2-aminoethyl)amine functionalized nanocrystalline cellulose as a novel nanocarrier for anticancer drug delivery of methotrexate. NewJ.Chem., 2017, 41, 3177 (ISI indexed).
- 42. Vahid Zijah, **Roya Salehi**, Marziyeh Aghazadeh, Mohammad Samiei, Effat Alizadeh and Soodabeh Davaran. Towards optimization of odonto/osteogenic bioengineering: in vitro comparison of Simvastatin, Sodium fluoride, Melanocytestimulating hormone. In Vitro Cellular & Developmental Biology Animal. 2017, 53(6):502-512 (ISI indexed).
- 43. Mehdi Sabzichi, **Roya Salehi**, Fatemeh Ramezani, Mohamad Bagher Piroozpanah, Mahdi Zeinali, Hamed Hamishehkar\*. A Comparative Cytotoxicity Study of Doxorubicin loaded PLGA, P (NIPAAm-MAA-DMAEMA) and Solid Lipid Nanoparticles as Anticancer Drug Delivery Systems. Latin American Journal of Pharmacy. 2017, 36 (4), 750-757 (ISI indexed).
- 44. Fatemeh Bazmi zeynabad, **Roya Salehi\***, and Mehrdad Mahkam. Design of pH-responsive antimicrobial nanocomposite as dual drug delivery system for tumor therapy, Applied Clay Science. Accepted Nov 2017,117,23-35 (**Corresponding author**) (**ISI indexed**).
- 45. Mitra Alami-Milani, Parvin Zakeri-Milani, Hadi Valizadeh, Roya Salehi, Sara Salatin, Mitra Jelvehgari\*.Novel Penta Block Copolymers: Thermosensitive Polymeric Micelles Self-Assembled as Ocular Drug Delivery Systems. Adv Pharm Bull, 2017, 7(1), 11-20 (ISI indexed).

- 46. Mahdi Rahimi, Kazem D. Safa,\* Effat Alizadeh and **Roya Salehi**\*Dendritic chitosan as a magnetic and biocompatible nanocarrier for the simultaneous delivery of doxorubicin and methotrexate to MCF-7 cell line. New Journal of Chemistry. 2017,41, 3177 (Corresponding author) (ISI indexed).
- 47. Farshid Hossein Panahi, Seyed Jamaleddin Peighambardoust \*, Soodabeh Davaran , Roya Salehi. Development and characterization of PLA-mPEG copolymer containing iron nanoparticle-coated carbon nanotubes for controlled delivery of Docetaxel. Polymer 117 (2017) 117e131 (ISI indexed).
- 48. Mehdi Sabzichi, Jamal Mohammadian, Hamed Hamishehkar, **Roya Salehi**\* and Nasser Samadi\*\*. Formulation of chrysin in nanostructured lipid carriers triggered apoptosis in MCF-7 cancer cells by inhibition of Nrf2 pathway. Process Biochemistry. 2017, 60, 84–91 (Corresponding author) (ISI indexed).
- 49. Vahid Shafiei-Irannejad, Nasser Samadi, **Roya Salehi**, Bahman Yousefi and Nosratollah Zarghami\*.New Insights into Antidiabetic Drugs: Possible Applications in Cancer Treatment. Chemical Biology and drug design. 2017 (ISI indexed).
- 50. Elham Zakerzadeh, Mehrdad Mahkam and **Roya Salehi\*.** Synthesis of new antibacterial Cubane-based nanocomposite and its application in combination cancer therapy. Anticancer agents in medicinal chemistry (Status: responses to revised submitted). **(Corresponding author) (ISI indexed)**.
- 51. Marziyeh Aghazadeh, Mohammad Samiei, Effat Alizadeh, Mohsen Bakhtiyari, Parisa Porkar and **Roya Salehi**\*. Towards Osteogenic Bioengineering of Dental Pulp Stem induced by Sodium fluoride on Hydroxyapatite based Biodegradable Polymeric Scaffold. Fibers and Polymers. 2017,18(8), 1468-1477 (Corresponding author) (ISI indexed).
- 52. Alireza Gharatape, **Roya Salehi\*.**Recent progress in theranostic applications of hybrid gold nanoparticles. European Journal of Medicinal Chemistry. 2017, 138, 221-233 (**Corresponding author**) (**ISI indexed**).
- 53. Monir Moradzadeh Khiavi, Khadijeh Abdal, Mehran Mesgari Abbasi, Hamed Hamishehkar, Amir Ala Aghbali, **Roya Salehi**, Mahmoud Sina, Bita Abdollahi & Soheila Fotohi. Comparison of injectable doxorubicin & its nanodrug complex chemotherapy for the treatment of 4-nitroquinoline-1-oxide induced oral squamous cell carcinoma in rats. Indian Journal of Medical Research. 2017, 145,112-117 (ISI indexed).
- 54. Mohsen Bakhtiari. **Roya Salehi**. Abolfazl Akbarzadeh. Soodabeh Davaran. Development of Novel Doxorubicin Loaded Biodegradable Polymeric Nanofibers as the Anticancer Drug Delivery Systems. BioNanoSci. 2017 **(ISI indexed)**.
- 55. Vahideh Raeisdasteh Hokmabad, Soodabeh Davaran, Ali Ramazani & **Roya Salehi\***. Design and fabrication of porous biodegradable scaffolds: a strategy for tissue engineering. Journal of Biomaterials Science, Polymer Edition. 2017, 28(16), 1797–1825 (Corresponding author) (ISI indexed).

- 56. Elham Zakerzadeh, **Roya Salehi\*** and Mehrdad Mahkam. Smart tetrazole-based antibacterial nanoparticles as multifunctional drug carriers for cancer combination therapy Drug Development and Industrial Pharmacy. 2017, 43(12), 1963–1977 (**Corresponding author**) (ISI indexed).
- 57. Nahideh Asadi, Effat Alizadeh, **Roya Salehi**, Bahar Khalandi, Soodabeh Davaran & Abolfazl Akbarzadeh. Nanocomposite hydrogels for cartilage tissue engineering: a review. Artificial Cells, Nanomedicine, and Biotechnology, 2017 (ISI indexed).
- 58. Aliyeh Ghamkhari, Bakhshali Massoumi & **Roya Saleh**i. A New Style for Synthesis of Thermo-Responsive Fe3O4/Poly (methylmethacrylate-b-N-isopropylacrylamide-b-acrylic acid) Magnetic Composite Nanosphere and Theranostic Applications. Journal of Biomaterials Science, Polymer Edition, 2017,28(17), 1985–2005 (ISI indexed).
- 59. Vahid Shafiei-Irannejad, Nasser Samadi, **Roya Salehi**, Bahman Yousefi and Nosratollah Zarghami\*Metformin enhances doxorubicin sensitivity via inhibition of doxorubicin efflux in P-gp-overexpressing MCF-7 cells. Journal: Chemical Biology & Drug Design. 2017 (ISI indexed).
- 60. Masoud Farshbaf, Soodabeh Davaran, Fariborz Rahimi, Nasim Annabi, **Roya Salehi\*** & Abolfazl Akbarzadeh\*\*. Carbon quantum dots: recent progresses on synthesis, surface modification and applications. Artificial Cells, Nanomedicine, and Biotechnology. 2017. **(Corresponding author) (ISI indexed).**
- 61. Mojtaba Abbasian, \* Farideh Mahmoodzadeh,\* **Roya Salehi** and Ahmad Amirshaghaghi. Chemo-photothermal therapy of cancer cells using gold nanorod-cored stimuli-responsive triblock copolymer. NewJ.Chem., 2017, 41, 12777 (ISI indexed).
- 62. Zarrin Ghasemi, Sajjad Azizi, Roya Salehi, Hossein Samadi Kafil. Synthesis of azo dyes possessing N-heterocycles and evaluation of their anticancer and antibacterial properties. Monatshefte für Chemie Monatsh Chem (2018) 149:149–157 (ISI indexed).
- 63. Masoud Farshbaf, Soodabeh Davaran, Amir Zarebkohan, Nasim Annabi, Abolfazl Akbarzadeh\*and **Roya Salehi** \*\*. Significant Role of Cationic polymers in Drug Delivery Systems. Artificial Cells, Nanomedicine, and Biotechnology. 2017. (Corresponding author) (ISI indexed).
- 64. Masoud Farshbaf, **Roya Salehi**, Soodabeh Davaran\*, Abolfazl Akbarzadeh\*\*. 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 (IDDI). 2017(ISI indexed).
- 65. Mahdi Rahimi, Kazem D. Safa,\* and Roya Salehi \*. Poly (ethylene glycol)-modified dendritic chitosan-Fe3O4 as a magnetic nanocarrier for combinational drug delivery to MCF7 cell line, Polymer Chemistry, 2017, 8, 7333. (Corresponding author) (ISI indexed).

- 66. Samad Hosseini Sadr, Soodabeh Davaran, Effat Alizadeh, Ali Ramazani\* and **Roya Salehi\*\***. Enhanced Anticancer Potency by thermo/pH responsive PCL-Based magnetic nanoparticles. Journal of Biomaterials Science, Polymer Edition, 2018, VOL. 29, NO. 3, 277–308 (Corresponding author) (ISI indexed).
- 67. Solmaz saghebasl, Soodabeh Davaran, Reza Rahbarghazi, Azadeh Montaseri, **Roya Salehi\*** and Ali Ramazani. 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, 2018(Corresponding author) (ISI indexed).
- 68. Samad Hosseini Sadr, Soodabeh Davaran, Effat Alizadeh, **Roya Salehi** \* and Ali Ramazani \*\*. PLA-Based magnetic nanoparticles armed with thermo/pH responsive polymers for combination cancer chemotherapy. Journal of Drug Delivery Science and Technology (Corresponding author) (ISI indexed).
- 69. Soodabeh Davaran; Hamed Fazeli; Aliyeh Ghamkhari; Ommoleila Molavi; Maryam Anzabi, **Roya Salehi\*\*.** Synthesis and Characterization of Novel P(HEMA-LA-DMAEMAQ) micelles for co-delivery of Methotrexate and Chrysin in combination cancer chemotherapy. Journal of Biomaterials Science, Polymer Edition, 2018 (Corresponding author) (ISI indexed).
- 70. Vahid Shafiei-Irannejad, Nasser Samadi, **Roya Salehi**, Bahman Yousefi, Mahdi Rahimi, Abolfazl Akbarzadeh, Nosratollah Zarghami. Reversion of Multidrug Resistance by Co-Encapsulation of Doxorubicin and Metformin in Poly(lactide-co-glycolide)- d  $\alpha$  tocopheryl polyethylene glycol 1000 Succinate Nanoparticles. Pharm Res (2018) 35:119**(ISI indexed).**
- 71. Sepideh Jabbari, Aliyeh Ghamkhari, Yousef Javadzadeh, **Roya Salehi\*** and Soodabeh Davaran\*\*.Synthesis and Characterization of Novel pH-responsive poly [(lactide-co- glycolic acid)-co-methacrylic acid] [(PLGA-co-PMAA)] micelle for co-delivery of Doxorubicin and Chrysin in combination chemotherapy. Journal of Drug Delivery Science and Technology,2018 (Corresponding author) (ISI indexed).
- 72. Ibrahim Hammami Torghabe, Saeed Jafari rad\*, Seyed Hosseyn rasta and **Roya Salehi\*\*.** A novel noninvasive strategy for low level laser-induced cancer therapy by green synthesis of new graphene based doped nanocomposites. Artificial Cells, Nanomedicine, and Biotechnology. 2017 (Corresponding author) (ISI indexed).
- 73. Ghazal Darfarin, **Roya Salehi**, Effat Alizadeh, Behnam Nasiri motlagh, Abolfazl Akbarzadeh, Alireza Farajollahi\*. The effect of SiO2/Au Core-shell Nanoparticles on breast cancer cell's radiotherapy. Artificial Cells, Nanomedicine and Biotechnology **(ISI indexed)**.
- 74. Mojtaba Ghanbari Mehrabani, Ramin Karimian, Rasul Rakhshaei, Farzaneh Pakdeld, Hosein Eslami, Vahid Fakhrzadeh, Mahdi Rahimi, **Roya Salehi**, Hossein Samadi Kafil. Chitin/silk fibroin/TiO2 bio-nanocomposite as a biocompatible wound dressing bandage

with strong antimicrobial activity. International Journal of Biological Macromolecules, 2018 (ISI indexed).

- 75. Mahdi Rahimi, Vahid Shafiei-Irannejad, Kazem D. Safa,\* and Roya Salehi,\*. Combination chemotherapy of MCF7 cells by dendritic ionic liquid-chitosan grafted mPEG as a multi-drug Nanocarrier. Carbohydrate Polymers (Corresponding author) (ISI indexed).
- 76. Ava Nasrolahi, Javad Mahmoudi\*, Abolfazl Akbarzadeh, Mohammad Karimipour, Saeed Sadigh-Eteghad, **Roya Salehi** and Mehdi Farhoudi\*. Neurotrophic factors hold promise for the future of Parkinson's disease treatment: is there a light at the end of the tunnel?. Rev. Neurosci. 2018(ISI indexed).
- 77. Vahideh Raeisdasteh Hokmabad, Soodabeh Davaran, Marziyeh Aghazadeh, Effat Alizadeh, **Roya Salehi**\* and Ali Ramazani\*. Novel Elaeagnus angustifolia incorporated PCL-PEG-PCL nanofibrous scaffolds for bone tissue engineering: Fabrication and Evaluation. Frontiers of chemical science and engineering (**Corresponding author**) (ISI indexed).

## **Under review papers in international journals**

- 2. Behnaz Banimohammad Shotorbani, Effat Alizadeh\*, **Roya Salehi\*\***, Abolfazl Barzegar, Nosratollah Zarghami, Shahryar Hashemzadeh. Bio-fabrication of adipose derived mesenchymal stem cells sheet by intelligent hydrogel- copolymer substrate. Journal of Materials Science, Materials in Medicine (**Corresponding author**) (ISI indexed).
- 3. Sima Alvani, Naseri\*, **Roya Salehi\*\***. Magnetic solid-phase extraction of Doxorubicin using core/shell pH sensitive polymer as Nano-adsorbent; chemometrices approach for optimization. Microchimica acta (**Corresponding author**) (ISI indexed).
- 4. Fatemeh Bazmi, **Roya Salehi\***, Effat Alizadeh, Hossein Samadi Kafil, Azad Mohammad Hassanzadeh and Mehrdad Mahkam. Multifunctional alginate/nanoclays/modified Silica Nanocomposites as antibacterial agent for Enhanced Cancer Therapy. Colloid and polymer science (**Corresponding author**) (ISI indexed).
- 5. Elham Ahmadi, Nosratollah Zarghami, Mohammad Asghari Jafarabadi, Leila Alizadeh, Mehran khojastehfard, Mohammad Rahmati Yamchi\* and **Roya Salehi**\*\*. Enhanced anticancer potency by combination chemotherapy of HT-29 cells with biodegradable, PH-sensitive micelle for co-delivery of Hydroxytyrosol and Doxorubicin. Colloid and surface B:Biointerface (Corresponding author) (ISI indexed).
- 6. Farideh Mahmoodzadeh, Azra khalili, Parisa Hasanzadeh, Mojtaba Abbasian\* and Roya salehi\*\*. Chemotherapy of breast cancer cells using novel pH-responsive cellulose-based nanocomposites. Drug development and industrial pharmacy (Corresponding author) (ISI indexed).
- 7. Marziyeh Aghazadeh, Mohammad Samiei, Vahideh Raeisdasteh Hokmabad, Effat Alizadeh4, Neda Jabbari, Alexander Seifalian and **Roya Salehi\***. The Effect of Melanocyte Stimulating Hormone and Hydroxyapatite on Osteogenesis in Pulp Stem Cells of Human

Teeth Transferred into Polyester Scaffolds. Fibers and Polymers (Corresponding author) (ISI indexed).

- 8. Vahideh Raeisdasteh Hokmabad, Soodabeh Davaran, Marziyeh Aghazadeh, Effat Alizadeh, **Roya Salehi** \*, and Ali Ramazani\*\*. Effect of n-SiO2 and n-HA incorporated on PCL-PEG-PCL/Chitosan scaffolds for bone tissue engineering. Tissue engineering and regenerative medicine (**Corresponding author**) (ISI indexed).
- 9. Saeideh Nozohouri, Roya Salehi, Saeed Ghanbarzadeh, Khosro Adibkia, Hamed Hamishehkar\*. A novel multilayer hollow nanocarrier for pulmonary co-drug delivery of methotrexate and doxorubicin in the form of dry powder inhalation formulation (ISI indexed).
- 10. Determination of breast vascular contrast by gold nano particles using near-infrared light" by Mehnati, Parinaz; alipour, bahman; Salehi, Roya. Journal of Optics (ISI indexed). 11. Hamed Hamishehkar, Mohammad Solhi, Dr Marjan ghorbani, Salar Hemmati, Mozhgan Sadeghi, Roya Salehi. Introduction of a new superdisintegrant for the formulation of domperidone tablet. Journal of Drug Delivery Science and Technology (ISI indexed).
- 12. Vahideh Raeisdasteh Hokmabad, Soodabeh Davaran, Marziyeh Aghazadeh, Reza Rahbar Ghazi, **Roya Salehi** \*, and Ali Ramazani\*\*Fabrication and characterization of novel ethyl cellulose-grafted-poly (ε-caprolactone)/alginate nanofibrous/macroporous scaffolds incorporated with nano-hydroxyapatite for bone tissue engineering (**Corresponding author**) (ISI indexed).
- 13. Mojtaba Abbasian\*, Parisa Hasanzadeh, Farideh Mahmoodzadeh, and **Roya salehi\*\***. Synthesis of novel Cellulose-based nanocomposites by RAFT polymerization for Chemotherapy of breast cancer cells. Journal of Biomaterial Science: Polymer edition **(Corresponding author) (ISI indexed).**
- 14. Hassan Namazi, Rasoul Rakhshaei, Hamed Hamishehkar, Hossein Samadi Kafilhs, **Roya Salehi**. Chitosan/Gelatin/ZnO nanocomposite hydrogel scaffold as antibacterial and drug delivery agent. Carbohydrate Polymers (ISI indexed).
- 15. Mitra Alami-Milani; Parvin Zakeri Milani; Hadi valizadeh; **Roya salehi**. Preparation and evaluation of PCEC micelles as potential nanocariers for ocular delivery of dexamethasone. International Journal of Pharmaceutics (ISI indexed).
- 16. Hannaneh Baradaran, Roya Salehi, Hamed Hamishehkar. Potential of star-shaped polymeric nanoparticles of polycaprolactone and poly (lactic-co-glycolic acid) for drug delivery; a comparative study with linear ones (ISI indexed).

#### Conference papers

1. **R. Salehi**, A.A. Entezami , K. Nowruzi , Controlled drug release from stimuli responsive polymers, 2007 57th Canadian Chemical Engineering Conference

- 2. **R. Salehi**, N.Arsalani, Thermosensitive and pH –sensitive N-isopropylacrylamide-Acrylamide-Vinylpyrrolidon terpolymers: synthesis, characterization and swelling studies, The Second International Conference on Advances in Petrochemicals and Polymers ICAPP 2007 (June 25-28 2007 Bangkok, Thailand).
- 3. Roya Salehi, S.Davaran, H.Hamishehkar. Development and Characterization of Cationic Thermo/pH Dual Responsive Magnetic Nanogels for Dual Anticancer Drugs Delivery, The 2nd international conference on Nanotechnology (ICN2014), Istanbul, Turkey
- 4. **R. Salehi**, N. Arsalani, S.Davaran and A.A. Entezami, , Synthesis and Characterization of Thermosensetive Poly(N-sopropylacrylamide-co-acrylamide-co-vinylpyrrolidone) Nanoparticles for Efficient Drug Delivery Systems, The First International conference on Nanoscience and Nanotechnology ICNN 2006 (18th to 20th December 2006 Tehran University
- 5. **Roya Salehi**, Nasser Arsalani, Soodabeh Davaran, Ali Akbar Entezami, Preparation of Thermosensitive Injectable Polymeri Nanoparticles for Efficient Drug Delivery System, 8th International Seminar on Polymer Science and Technology (ISPST 2007, Sharif University; Tehran)
- 6. **R.Salehi**, S.Davaran, N.Arsalani and A.A.Entezami, Controlled release of Naltrexone from thermosensitive and pH-sensitive nanoparticulated system, 3rd Iranian Congress on Novel Drug Delivery Systems (21st June 2007, Tehran University, Tehran)
- 7. R. Salehi, S. Davaran, G. R. Dehghan, O. Mashinchian, A.A.Entezami, Incorporation and in vitro release of Farnesiferol C in thermally sensitive micellar nanoparticles made from poly (N-isopropylacrylamide- b-poly (L-lactide-co-glycolide) with varying compositions, The Second International congress on Nanoscience and Nanotechnology ICNN 2008 (28th to 30th October 2008 Tabriz University, Tabriz).
- 8. Soudabeh Davaran, Mohammad R. Rashidi, **Roya Salehi**, Sohrab Ghyasvand, Mortaza Ghandadi, PLGA-based nanoparticles for oral insulin delivery: synthesis and in-vitro evaluations, The Second International congress on Nanoscience and Nanotechnology ICNN 2008 (28th to 30th October 2008 Tabriz University, Tabriz).
- 9. O Mashinchian, S Davaran, **R Salehi**, S Atashpaz, S Khani, Y Omidi, Development of a novel method for oral insulin delivery. Proceeding of the International Congress on Diabets and its Complications, ICDC 2009. Iranian journal of DIABETES AND OBESITY, Pre-Issue. Spring 2009
- 10. Soudabeh Davaran, Gholamreza Dehghan, **Roya Salehi**, Ayoub Aganejad and Omid Mashinchian. Preparation of polymeric nanoparticles containing Farneci ferol with anticancer effect, Iranian Congress of novel ideas in Healthcare, Urumia, 13 March, 2009
- 11. Roya Salehi\*, Soodabeh Davaran, Hamed Hamishekar, Functionalized cationic silica Nanoparticles as biocompatible carriers by Stimuli- responsive Nanovalves as double

- anticancer drug delivery systems,1st Tabriz International Life Science Conference & 12th Iran Biophysical Chemistry Conference(TILSC & IBCC) 22-24 May, 2013, Tabriz, Iran
- 12. **R. Salehi\***, S. Rasouli, S. Davaran, Synthesis of Novel cationic and pH-sensitive Polymeric Nanocomposites based on Silica, 1th Iranian Congress on Nanotechnology, May 2013, Tarbiat Modarres University, Tehran)
- 13. S. Rasouli, M.Mahkam, **R.Salehi**, Preparation of Cationic and pH-sensitive copolymers for targeting delivery of Methotrexate as an anticacer drug, 1th Iranian Congress on Nanotechnology, May 2013, Tarbiat Modarres University, Tehran)
- 14. **Roya Salehi\*.** Bioengineering of Dental Pulp Stem Cells in a Micro porous PNIPAAm-PLGA Scaffold,21st International iranian Congress of Physiology and Pharmacology 23-27 August 2013, Tabriz University of Medical Science, poster
- 15. **Roya Salehi\***. Stimuli-Responsive Nanofibers Prepared from Poly (N-isopropylacrylamide-acrylamide-vinylpyrrolidone) by Green Electroespining as an Anticancer Drug Delivery, 21st International Iranian Congress of Physiology and Pharmacology 23-27 August 2013, Tabriz University of Medical Science, Oral presentation
- 16. Somayeh Alimohammadi, **Roya Salehi**, Soodabeh Davaran, A protein delivery system: Biodegradable star-shaped poly lactide-co-glycolide— β -cyclodextrin copolymer Nanoparticles. 21st International iranian Congress of Physiology and Pharmacology 23-27 August 2013, Tabriz University of Medical Science, Poster
- 17. Somayeh Alimohammadi, **Roya Salehi**, Soodabeh Davaran. In vitro studies of NIPAAM-MAA-VP copolymer-coated magnetic nanoparticles for controlled drug release, 21st International iranian Congress of Physiology and Pharmacology 23-27 August 2013, Tabriz University of Medical Science, Poster
- 18. Mojtaba Abbasina , **Roya salehi** , Azar Khalili , Mona Pakzad. Synthesis of cellulosic-based copolymer via reversible addition fragmentation chain transfer (RAFT) process .The 23nd Iranian Seminar of Organic Chemistry . 8-10 September 2015 , Univercity of Kurdistan , Sanandaj-Iran
- 19. Mojtaba Abbasina , **Roya salehi** ,Parisa Hassanzadeh. Preparation of nanozinc oxide compositescoated with cationic copolymers by RAFT polymerization .The 23nd Iranian Seminar of Organic Chemistry . 8-10 September 2015 , Univercity of Kurdistan , Sanandaj-Iran
- 20. Asrin Pakravan, **Roya Salehi**, Mehrdad Mahkam. Synthesis of Different shape of Gold Nanoparticles and Investigation of Particle Shape on Photothermal Therapy of Cancer Cells. 19<sup>th</sup> Iranian Chemistry Congress. 20-24 February, 2017, University of Shiraz

- 21. Leyla Mohammadzadeh, **Roya salehi**, Mehrdad Mahkam Preparation and Characterization of Egg Shell Membrane Electrospun Nanofibers. 19<sup>th</sup> Iranian Chemistry Congress. 20-24 February, 2017, University of Shiraz
- 22. **Roya salehi**, Solmaz Sagheb, Soodabeh Davaran, Ali Ramazani. Synthesis and characterization of thermosensitive hydrogel scaffolds based on polycaprolactone copolymers for use in cartilage tissue engineering. Second International Congress on Stem cell and Regenerative Medicine. July 13, 2017
- 23. **Roya salehi**, Vahideh Raeisdasteh Hokmabad, Soodabeh Davaran, Ali Ramazani Synthesis and characterization of novel scaffolds based on polycaprolactone hydroxy apatite nanocomposites for bone tissue engineering using human dental pulp stem cells Second International Congress on Stem cell and Regenerative Medicine. July 13, 2017
- 24. **Roya salehi**, Leyla Mohammadzadeh, Mehrdad Mahkam. Egg shell membrane nanofibers for preparation of biodegradable scaffolds in tissue engineering application Second International Congress on Stem cell and Regenerative Medicine. July 13, 2017

#### **Patents**

- 1.S. Davaran, R. Salehi, A. A. Entezami, M.R. Rashidi, M. Mesgari, Synthesis of Smart Hydrogels sensitive to temperature and pH based on N-isopropylacrylamide copolymers for use in drug delivery sestems, Iranian Office of Invention Registration 47734, May 3rd 2008.
- 2.S.Davaran, A.Aganejad, R.Salehi, Preparation of polymeric nanoparticles containing Farnesiferol with anti cancer effect, Iranian Office of Invention Registration 56417, Jan 18th 2009.
- 3. S.Davaran, A. Aganejad, R. Salehi, Preparation of polymeric nanoparticles containing Dexamethason for treatment of inflammation of cornea, Iranian Office of Invention Registration 56418, Jan 18th 2009.

#### **Projects**

- 1. Selected national project entitled" preparation of naltrexone sustained released delivery systems for treatment of narcotic addiction".2012. Terminated at 2014.
- 2. Synthesis of smart thermo/pH sensitive hydrogels and nanoparticles based on N-isopropylacrylamide used in naltrexone implantable/injectable delivery systems. 2009. Terminated at 2011.
- 3. Preparation and in-vivo investigation of sustained released naltrexone delivery with thermo responsive biodegradable polymers. 2012

- 4. Synthesis, characterization and application of nanostructural polymeric scaffolds for drug delivery and tissue engineering. 2012. Terminated at 2014.
- 5. Synthesis, characterization and application of novel nanostructural cationic polymers in multiple anticancer drugs delivery. 2014
- 6. Methotrexate-loaded nanoparticles prepared from biodegradable and biocompatible star polymers loaded into nano-liposomal structures for skin delivery. 2014.
- 7. Preparation of biocompatible and paramagnetic core-shell hollow nanoparticles from modified silica nanoparticles for pulmonary drug delivery of Methotrexate and Doxorubicin. 2014.
- 8. Investigation and comparison of toxicity of Doxorubicin loaded on magnetic synthetic magnetic nanocarriers based on PLGA, magnetic nanogels based on acrylates and SLNs on skin and breast cancer cell lines. 2014.
- 9. Preparation of magnetic nanoparticles coated with biodegradable and biocompatible polymers sensitive to pH and temperature for anticancer drug delivery. 2015
- 10. Preparation of magnetic biocompatible, PH sensitive nanoparticles based on branched chitosan for anticancer drug delivery. 2015
- 11. Fabrication of Porouse Nanofibrous Scaffolds by TIPS Method with biodegradable hydrophilic/hydrophobic blend polymers for tissue engineering application. 2015
- 12. Synthesis and Characterization of Thermo-sensitive Hydrogel Scaffold Based on Poly Caprolactone for Cartilage tissue engineering. 2015
- 13. Synthesis and Characterization of Novel Scaffold based on Poly Caprolactone/Hydroxyapatite for Bone Tissue Engineering Application Using Dental Pulp Stem Cells. 2014
- 14. The role of Nrf2 transcription factor in overcoming Doxorubicin resistance in breast cancer chemotherapy
- 15. Preparation of Zinc oxide/Iron oxide Coated Cationic Copolymers with RAFT Polymerization for Anticancer Drug Delivery of Methotrexate
- 16. Synthesis of Poly acrylic acid Bonded on Xanthates using RAFT Polymerization and Preparation of Zinc oxide/Iron oxide Nano-composites Coated Anionic Copolymers as Doxorubicin Delivery system
- 17. Synthesis and characterization of polymeric magnetic nanoparticles and its application in solid-phase extraction and determination of preservatives in food and hygienic samples

- 18. Investigation laser therapy effect of polymeric modified gold nanoparticlse containing doxorobicin on breast caccer cell lines
- 19. Synthesis and characterization of some main and transition metal complexes with 5,5' bis tetrazol and study of their pharmaceutical properties
- 20. Synthesis of biodegrable Nano-polymer based on 2- hydroxyethylmethacrylate, N-isopropyl acrylamide and caprolatone and investigation of their application as dual anticancer drug delivery and scaffold for tissue engineering
- 21. The effects of low-level laser therapy in the presence silica-coated gold nanoparticles on two cell lines MCF-7 and MDA-MB-231 of breast cancer
- 22. Investigation photothermal therapy effects of nanocomposite (ZnO-rGO) doped with Nd and Ag particles through the green synthesis using extract Rosa cannina L. on MCF-7 cell lines
- 23. Effect of SiO2/Gold core-shell nanoparticles with different particle size for radiation therapy of breast and prostate cancer
- 24. Egg shell membrane nanofibers for preparation of biodegradable scaffolds in tissue engineering application
- 25. Synthesis of different shape of gold nanoparticles as drug nanocarriers and investigation of particles shape and laser type (pulsed and continuous) on photothermal therapy of breast cancer cells.
- 26. Synthesis and Characterization of new drug delivery system based on cyclodextrin and modified MNPs
- 27. In vitro evaluation of POSS nanocages bonded to biodegradable polyurethane- acrylated polyester copolymers containing Acetylated lipoprotein scaffold on endothelial cells attachment and functionality
- 28. Effect of basic fibroblast growth factor (BFGF) on angiogenesis of dental pulp mstem cells transferred to polymeric scaffold
- 29. Synthesis of hybrid amphiphilic poly methacrylic acid-poly lactide-co-glycolide nanogels for use in dual delivery of chrysin-doxorubicin
- 30. Investigation the effect of Epigallocatechin gallate encapsulated chitosan/silica nanocomposite attached aptamer on ERK2 and hTERT gens expression of ovarian cancer
- 31. The role of Nrf2 in overcoming Oxaliplatin-induced resistance in colon cancer cells

- 32. Study of CDNF loaded PLLA nanobiomaterial Effect on endogeneous Neural Stem cells Migration and disease functional recovery in rat model of Parkinson
- 33. Biological synthesis of graphene nanocomposite Nd/ZnO, Ag/ZnO using plant Rosa cannina L., investigation on properties and application its compounds in biomedicine-MSc of Phytochemistry

## **Thesis**

- 1. The effect of SiO2/Gold core-shell nanoparticles on breast cancer cells radiotherapy-MSc of Medical physics (Supervisor)
- 2. Synthesis and characterization of methotrexate containing magnetic nanoparticles modified with cationic polymers and evaluation of their effect on lung cancer cell line-MSc of Medical Nanotechnology (Advisor)
- 3. Synthesis of Functionalized gold nanoparticle and study of antibacterial effect on gram negative phatogenic bacteria via photothermal therapy-MSc of Medical Nanotechnology (Advisor)
- 4. The effect of low level laser therapy in the presence of gold coated silica nanoparticles loaded with methotrexate on two cell lines MCF-7 and MDA-MB-231 of breast cancer-MSc of Biotechnology (Supervisor)
- 5. Construction of absorbent filter pollutants in second hand smoke from cigarettes through the synthesis of nano-composites based on cellulose acetate containing montmorillonite nanoparticles by electrospinning cellulose acetate solution directly to install on a ventilation system-MSc of Medical Nanotechnology (Supervisor)
- 6. Designing a novel nano-bioconjugation method for detection of biomolecules based on local surface plasmon resonance-MSc of Medical Nanotechnology (Supervisor)
- 7. Study of aging and antiaging process on stem cells using nano-titanium and zataria multiflora boiss-MSc Biophysic (Advisor)
- 8. The effect of thermo-responsive polymer coated topographical surface in differentiation of human adipose derived stem cells to keratinocyte-like cells and creating cell sheet-PhD of Biotechnology (Advisor)
- 9. Preparation and evaluation of nanocomposite drug delivery system based on poly lactic acide poly ethylene glycol containing carbon nanotubes and Fe3O4 nanoparticles for controlled release of Docetaxel-MSc of chemical engineering (Advisor)
- 10. Design and fabrication of mesenchymal stem cell sheet using thermosensitive polymers-MSc Biophysic (Advisor)

- 11. Anti bacterial activity of novel edible nano coating and its effect on durability of some fish fillets-PhD (Advisor)
- 12. Synthesis and characterization of novel scaffolds based on poly caprolactone Hydroxyapatite for bone tissue engineering using dental pulp stem cells-PhD of Organic Chemistry (Advisor)
- 13. Synthesis and characterization of thermosensitive hydrogel scaffolds based on poly caprolactone for cartilage tissue engineering- PhD of Organic Chemistry (Advisor)
- 14. Preparation of biocompatible and paramagnetic core-shell hollow nanoparticles for pulmonary drug delivery of Methotrexate and Doxorubicin- Pharm.D (Advisor)
- 15. Regenerative study of skin burn in rat using of adipose-derived mesenchymal stem cells seeded in to two novel scaffolds-PhD (Advisor)
- 16. Determination of vascular contrast of hemoglobin within gold nano particles and quantum dots using near infra red-MSc of Medical physics (Advisor)
- 17. Mesenchymal stem cell sheet engineering and optimizing using thermosensitive polymers with selenium effects-MSc Biophysic (Advisor)
- 18. Preparation of nanofibers based on egg shell membrane as biodegradable scaffold and its application on tissue engineering- PhD of Organic Chemistry (Supervisor)
- 19. Synthesis of different shaped gold nanoparticles as nano drug delivery systems and investigation of nanoparticle shape and applied laser type (pulsed/continuous) on photothermal effect of breast cancer cells- PhD of Organic Chemistry (Supervisor)
- 20. Synthesis and Characterization of polymeric magnetic nanoparticles and its application in solid-phase extraction and determination of some preservatives in food and hygienic samples-MSc of Analytical Chemistry (Supervisor)
- 21. Preparation of magnetic nanoparticles based on branched chitosan and investigation of its application in co-delivery of anticancer drugs methotrexate and doxorubicin- PhD of Organic Chemistry (Advisor)
- 22. Preparation of magnetic nanoparticles coated with new biodegradable and biocompatible grafted copolymers sensitive to pH and temperature based on poly caprolactone- PhD of Organic Chemistry (Advisor)
- 23. Synthesis and characterization of some main and transition metal complexes with 5,5' bis tetrazol and study of their pharmaceutical properties- PhD of Inorganic Chemistry (Supervisor)
- 24. Synthesis and application of smart biocompatible nanocomposites for simultaneous multi drug delivery for cancer treatment- PhD of Organic Chemistry (Advisor)

- 25. Simultaneous Multi drug delivery in cancer treatment using smart antibacterial nanocomposites- PhD of Organic Chemistry (Advisor)
- 26. Synthesis and characterization of gold nanorod coated biodegradable copolymers based on poly caprolactone/ poly acrylic acid-poly N-isopropyl acrylamide using ring opening and RAFT polymerization and investigation of this polymeric nanocomposite application on controlled delivery of doxorubicin- PhD of Organic Chemistry (Advisor)
- 27. Preparation of cationic copolymers coated zinc oxide nanocomposites by RAFT polymerization for methotrexate delivery- MSc of Organic Chemistry (Supervisor)
- 28. Synthesis of magnetic nanoparticles based on 2-(Dimethylamino) ethyl methacrylate by ATRP polymerization for controlled delivery of anticancer drug- MSc of Organic Chemistry (Supervisor)
- 29. Synthesis of poly acrylic acide grafted on xanthate using RAFT polymerization and preparation of magnetic nanocomposites coated anionic copolymers for doxorubicin delivery- MSc of Organic Chemistry (Supervisor)
- 30. Preparation of porous scaffolds using PCL/PEG, PLA/PEG, chitosan/gelatin by TIPS method and investigation of its ability for stem cells growth-MSc of Medical Nanotechnology (Advisor)
- 31. Investigation the effect of Epigallocatechin gallate encapsulated chitosan/silica nanocomposite attached aptamer on ERK2 and hTERT gens expression of ovarian cancer-MSc of Biotechnology (Supervisor)
- 32. Comparison the effect of hydroxytyrosol and doxorubicin in free form and encapsulated on PLGA-PAA on Creb and hTERT gens expression of colon cancer-MSc of Biotechnology (Supervisor)
- 33. Biological synthesis of graphene nanocomposite Nd/ZnO, Ag/ZnO using plant Rosa cannina L., investigation on properties and application its compounds in biomedicine-MSc of Phytochemistry (Supervisor)
- 34. Investigation laser therapy effect of polymeric modified gold nanoparticles containing doxorubicin on breast cancer cell lines-MSc of Medical Nanotechnology (Supervisor)
- 35. Methotrexate-loaded nanoparticles prepared from biodegradable and biocompatible star polymers loaded into nanoliposomal structures for skin delivery—Pharm.D (Advisor)
- 36. Synthesis of grafted poly ( $\epsilon$ -caprolactone) poly (N,N-dimethylaminoethyl methacrylate-co-hydroxyethyl methacrylate) copolymers for preparation of Chrysin-methotrexate nanoparticles—Pharm.D(Advisor)

- 37. Synthesis of grafted poly (ε-caprolactone) poly (N-isopropylacrylamide-co-hydroxyethyl methacrylate) copolymers for preparation of doxorubicin nanoparticles-Pharm.D (Advisor)
- 38. Synthesis of hybrid amphiphilic poly methacrylic acid-poly lactide-co-glycolide nanogels for use in dual delivery of chrysin-doxorubicin- MSc of Medicinal Chemistry (Advisor)
- 39. Synthesis and Characterization of new drug delivery system based on cyclodextrin and modified MNPs-PhD of Analytical Chemistry (Supervisor)
- 40. Study of apoptotic and anti-proliferative effects of nano-encapsulated AUR on HT-29 & sw480 colon cancer cell lines- MSc of Biology-Biochemistry (Supervisor)
- 41. Investigation of toxicity of doxorubicin loaded iron oxide nanocarriers modified with natural polymers on breast cancer T47D cell lines- MSc of Biochemistry (Supervisor)
- 42. In vitro Study on anti-inflammatory effects of Emu oil-based nanofibrous scaffold- MSc of Biotechnology (Advisor)