



# Abolfazl Akbarzadeh

*Email:* a.akbarzadeh@northeastern.edu

akbarzadehab@tbzmed.ac.ir

*University Street*

*Tabriz University of Medical Sciences*

*Tabriz, Iran.*

*Tel. +16176392175*

*+989121904385*

*Highly Cited Researcher, Thomson Reuters ISI Web of Science, an honor bestowed to the top 1% of scholars worldwide in terms of citations, 2015, 2016 ,and 2017*

## ***Professional Experience***

**Associate Professor** of Medicinal chemistry (Nanobiomedicine), Department of Medical Nanotechnology, Faculty of Advanced Medical Sciences, Tabriz University of Medical Sciences, Tabriz, Iran.

Visiting Professor at Department of Chemical Engineering, Northeastern University, Boston, USA

Visiting Professor at Department of Chemical and Biomolecular Engineering in the Henry Samueli School of Engineering and Applied Science at University of California, Los Angeles (UCLA), California, USA

## ***Educational Background***

- B.Sc of Applied chemistry, Faculty of Chemistry, Tabriz University, Tabriz, Iran, 1990-1994.
- M.Sc of Pure Chemistry, Faculty of Chemistry, Shahid Beheshty University, Tehran, Iran, 1995-1997.
- Ph.D of Medicinal Chemistry, Tabriz University of Medical Sciences, 2009-2012.



## ***Teaching experiences (Since 2005)***

Teaching and lecturer in Tabriz University of Medical Sciences (from 2009 – 2014) and Islamic Azad University of Tehran (from 1998 – 2009) consisting:

- Nanostructure and Nonmaterial
- Nanobiomedicine
- Introduction to Nanotechnology
- Organic Chemistry 2; Organic Chemistry 1 and Different Practical Courses
- Inorganic Chemistry 2; Inorganic Chemistry 1 and Different Practical Courses
- General Chemistry 2; General Chemistry 1 and Different Practical Courses
- Medicinal Chemistry 1; Medicinal Chemistry 2 ; Medicinal Chemistry 3 and Different Practical Courses
- Analytical Chemistry and Different Practical Courses, Instrumental analysis
- Microfluidics

## ***Research experiences and fields of interest:***

Preparation and *In-vitro* Evaluation of Doxorubicin-Loaded Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanoparticles Modified with Biocompatible Copolymers in Lung Cancer Cells.

Regarding my background in designing and preparation of various types of nanoparticles and nanofibers for drug and gene delivery to the different tissues including skin and stem cells, I would like to design novel drug delivery systems possessing the anti-inflammatory, anti-microbial and anti-oxidant properties aiming at rapid skin regeneration. The main drug in these systems will be Propolis (a natural material derived from honey bee). During my project, I will use your 3-D printing system to produce my model skin tissue. In addition to the skin nanobioengineering, I would like to be involved in the projects which aim to engineer bone tissue, as I have undertaken a project in which I have found zeolite/hydroxyl apatite nanoparticles are potent bone and tooth pulp regenerator nanomaterial.

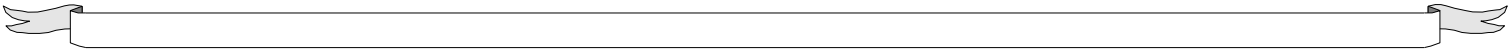
## ***Other interesting fields are:***

Microfluidic-based synthesis of nanobiomaterials for designing efficient nanobio-targeting molecules

## ***Research experiences:***

3DBioprinting  
Biomaterials  
Tissue Engineering  
Biomedical Engineering  
Bioengineering  
Nanomaterials  
Drug Delivery

---





## ***Current Research:***

Engineering Hydrogel with tunable properties for soft tissue regeneration.

Preparation of Polymeric Micro and Nanoparticles Containing Protein- Peptide and Anti Cancer Drugs.

***H-index (SCOPUS): 29***

(<http://www.scopus.com/authid/detail.url?origin=resultslist&authorId=36787804000&zone=>)

***H-index (GoogleScholar): 33***

(<http://scholar.google.com/citations?user=OjajaocAAAAJ&hl=en>)

## ***Honors and Awards:***

- Highly Cited Researcher, Thomson Reuters ISI Web of Science, an honor bestowed to the top 1% of scholars worldwide in terms of citations, 2015, and 2016
- First ranked researcher in Tabriz University of Medical Sciences in the field of nanobiomedicine (2015 and 2016)
- Selected in "First student Olimpiad Competition" of Iran.
- Selected project in Fourth and Fifth Nokhbegan Foundation in third grade.
- 2th Researcher Selected in Faculty of Advanced Medical Sciences (2013).
- Best oral presentation award in 16th Iranian Pharmacy student seminar 15-17 october, 2011, Tehran, Iran
- Selected third university undergraduate PhD student thesis award, Tabriz University of Medical Sciences, Tabriz, Iran, 2012.

## ***Patents:***

- **Akbarzadeh A**, Davaran S, Maleki V. Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible copolymers. An Iranian patent numbered 73080 (2012)
  - **Akbarzadeh A**. Synthesis, characterization and in vitro evaluation of novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. An Iranian patent numbered 78456 (2013)
  - **Akbarzadeh A**, Davaran S, Maleki V. Synthesis, characterization and in vitro studies of doxorubicin-loaded magnetic nanoparticles grafted to smart copolymers on A549 lung cancer cell line. An Iranian patent numbered 78446 (2013)
  - **Akbarzadeh A**, Jahangirs S, Characterization and in vitro studies of MTX-loaded magnetic nanoparticles on A549 lung cancer cell line. An Iranian patent numbered 78446 (2017)
- 



---

## ***Editorial Bords:***

### ***Journals***

1. Artificial Cells, Nanomedicine, and Biotechnology *IF=3.02*
2. Jacobs Journal of Molecular and Translational Medicine *Pubmed*
3. Stem Cell and Translational Investigation *Pubmed*
4. SM Journal of Nanotechnology and Nanomedicine *Pubmed*

## ***Publications***

1. **Abolfazl Akbarzadeh**, Samiei Mohamad, Soodabeh Davaran . Magnetic Nanoparticles: Preparation, Physical Properties and Applications in biomedicine, *Nanoscale research letters* ,2012, 7:144-157
  2. Alireza Valizadeh, Haleh Mikaeili, Mohammad Samiei, Samad Mussa Farkhani, Nosratollah Zarghami, Mohammad kouhi, **Abolfazl Akbarzadeh**, Soodabeh Davaran. Quantum dots: synthesis, bioapplications, and toxicity. *Nanoscale research letters* ,2012, 7:276
  3. **Abolfazl Akbarzadeh**, Rogaie Rezaei-Sadabady, Soodabeh Davaran, Sang Woo Joo, Nosratollah.Zarghami, Younes Hanifehpour, Mohammad Samiei, Mohammad kouhi, Kazem Nejati-Koshki, Liposome: Classification, Preparation, and Applications. *Nanoscale Research Letters* 2013, 8:102
  4. **Abolfazl Akbarzadeh**, Haleh Mikaeili, Davoud Asgari, Nosratollah Zarghami, Rahmati Mohammad, Soodabeh Davaran, Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible copolymers , *International Journal of Nanomedicine*, 2012:7 511–526
  5. **Abolfazl Akbarzadeh**, Nosratollah Zarghami, Haleh Mikaeili, Davoud Asgari, Amir Mohammad Goganian, H. Khaksar Khiabani, Soodabeh Davaran. Synthesis, characterization and in vitro evaluation of novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. *International Journal of Nanotechnology, Science, Environment*, 2012:5 13–25
-

---

6. **Akbarzadeh, A.**, Samiei, M., Joo, S.W., Anzaby, M., Hanifehpour, Y., Nasrabadi, H.T., Davaran, Synthesis, characterization and in vitro studies of doxorubicin-loaded magnetic nanoparticles grafted to smart copolymers on A549 lung cancer cell line, Journal of Nanobiotechnology 2012, 10:46-58

7. Mollazade .M, Nejati-Koshki K, **Abolfazl Akbarzadeh**, Younes Hanifehpour, Zarghami .N, Sang Woo Joo. PAMAM Dendrimers Argument Inhibitory Effect of Curcumin on Cancer Cell Proliferation: Possible Inhibition of Telomerase . Asian Pac J Cancer Prev, 2013, 14 (11), 6925-6928

8. Kazem Nejati-Koshki, **Abolfazl Akbarzadeh**, Mohammad pourhasan-Moghadam. San woo joo. Inhibition of Leptin and Leptin Receptor Gene Expression by Silibinin- Curcumin Combination .Asian Pac J Cancer Prev, 2013, 14 (11), 6595-6599

9. Rogaie Rezaei-Sadabady, Nosratollah Zarghami, Abolfazl Barzegar, Akram Eidi, **Abolfazl Akbarzadeh**, Mustafa Rezaei-Tavirani. Studies of the Relationship between Structure and Antioxidant Activity in Interesting Systems, Including Tyrosol, Hydroxytyrosol Derivatives Indicated by Quantum Chemical Calculations. Soft, 2013, 2, 13-18

10. S Fallahzadeh, H Bahrami, **A Akbarzadeh**, M Tayarani. High-isolation dual-frequency operation patch antenna using spiral defected microstrip structure. Antennas and Wireless Propagation Letters, IEEE 9, 122-124

11. Zohreh Ebrahimnezhad, Nosratollah Zarghami, Manoutchehr Keyhani, Soumaye Amirsaadat, **Abolfazl Akbarzadeh**, Mohammad Rahmati, Zohreh Mohammad Taheri, Kazem Nejati-Koshki. Inhibition of hTERT Gene Expression by Silibinin-Loaded PLGA-PEG-Fe<sub>3</sub>O<sub>4</sub> in T47D Breast Cancer Cell Line. BioImpacts, 2013, 3(2), 67-74

12. Mohammad Pourhassan-Moghaddam, Mohammad Rahmati-Yamchi, **Abolfazl Akbarzadeh**, Hadis Daraee, Kazem Nejati-Koshki, Younes Hanifehpour and Sang Woo Joo. Protein detection through different platforms of immuno-loop-mediated isothermal amplification. Nanoscale Research Letters 2013, 8:485

13. Ahmadi A, Shirazi H, Pourbagher N, Akbarzadeh A, Omidfar K, An electrochemical immunosensor for digoxin using core-shell gold coated magnetic nanoparticles as labels. Mol Biol Rep. 2014 Molecular biology reports 41 (3), 1659-1668.

14. Soodabeh Davaran, **Abolfazl Akbarzadeh**, Kazem Nejati-Koshki, Somayeh Alimohammadi, Mahmoud Farajpour Ghamari, Mahsa Mahmoudi Soghrati, Akbar Rezaei, Amir Ahmad Khandaghi, In vitro studies of NIPAAM-MAA-VP copolymer-coated magnetic nanoparticles for controlled anticancer drug release, Journal of Encapsulation and Adsorption Sciences, 2013, 3, 108-115

---

---

15.Samaneh Ghasemali, Kazem Nejati-Koshki, [Abolfazl Akbarzadeh](#), Elham Tafhiri , Nosratollah Zarghami , Mohamad Rahmati-Yamchi, Effat Alizadeh, Amin Barkhordari , Majid Tozihi , Shirafkan Kordi, Study of Inhibitory Effect of  $\beta$ -Cyclodextrin-HelenalinComplex on HTERT Gene Expression in T47D Breast Cancer Cell Line by Real TimeQuantitative PCR (q-PCR), Asian Pac J Cancer Prev, 2013, 14 (11), 6949-6953

16.Fatemeh Sadat Tabatabaei Mirakabad, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami,Vahideh Zeighamian, Amirbahman Rahimzadeh , Somayeh Alimohammadi,PLGA-Based Nanoparticles As Cancer Drug Delivery Systems, APJCP. Asian Pac J Cancer Prev.2014, 15 (1), 517-535

17.Soodabeh Davaran, Akbar Rezaei, Somayeh Alimohammadi, Amir Ahmad Khandaghi, Kazem Nejati-Koshki, Hamid Tayefi Nasrabadi, [Abolfazl Akbarzadeh](#), Synthesis and Physicochemical Characterization of Biodegradable star-shaped poly lactide-co-glycolide–  $\beta$  -cyclodextrin copolymer Nanoparticles Containing Albumin,Advances in Nanoparticles, 2014, 3, 14-22

18. Mohammad Kouhi, Ali Vahedi, [Abolfazl Akbarzadeh](#), Younes Hanifehpour, Sang Woo Joo.Investigation of Quadratic Electro-Optic Effects and Electro Absorption Process in GaN/AlGaN Spherical Quantum Dot. Nanoscale Research Letters 2014, 9:131-136

19. Elham Abbasi, Sedigheh Fekri Aval, [Abolfazl Akbarzadeh](#), Morteza Milani, Hamid Tayefi Nasrabadi, Younes Hanifehpour, Kazem Nejati-Koshki, Roghiyeh Pashaei-Asl.Dendrimers: synthesis, applications, and properties.Nanoscale Research Letters 2014, 9 (1), 247

20. Mohammad Pourhassan-Moghaddam, Nosratollah Zarghami, Afshin Mohsenifar, Mohammad Rahmati-Yamchi, Davud Gholizadeh, [Abolfazl Akbarzadeh](#), Miguel de la Guardia, Kazem Nejati-Koshki Watercress-based gold nanoparticles: biosynthesis, mechanism of formation and study of their biocompatibility in vitro. IET Digital Library, 2014,4,5

21.E Abbasi, M Milani, S Fekri Aval, M Kouhi, [A Akbarzadeh](#), H Tayefi Nasrabadi.Silver nanoparticles: synthesis, properties, bio-applications and limitations.2014,Crit Rev Microbiol 1

---

---

22. Ali Eatemadi, Hadis Daraee, Nosratollah Zarghami, Hassan Melat Yar, [Abolfazl Akbarzadeh](#), Younes Hanifehpour. Nanofiber; Synthesis and Biomedical Applications. *Artificial Cells, Nanomedicine, and Biotechnology*, 2014, *Artificial Cells, Nanomedicine, and Biotechnology*, 1-11.

23. Sara Hosseininasab, Roghiyeh Pashaei-Asl, Amir Ahmad Khandaghi, Hamid Tayefi Nasrabadi, Kazem Nejati-Koshki, [Abolfazl Akbarzadeh](#), Sang Woo Joo, Younes Hanifehpour, Soodabeh Davaran. Synthesis, characterization, and In vitro studies of PLGA-PEG nanoparticles for oral Insulin delivery. *Chemical biology & drug design*. 2014, 84 (3) 307-315.

24. Zahra Davoudi, [Abolfazl Akbarzadeh](#), Mohammad Rahmatiyamchi, Ali Akbar Movassaghpour, Mohsen Alipour, Kazem Nejati-Koshki, Zohre Sadeghi, Hassan Dariushnejad, Nosratollah Zarghami. Molecular Target Therapy of AKT and NF- $\kappa$ B Signaling Pathways and Multidrug Resistance by Specific Cell Penetrating Inhibitor Peptides in HL-60 Cells. *Asian Pacific journal of cancer prevention: APJCP* 15 (10), 4353

25. 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*. Vol. 4, No. 10, p. 134-145

26. Davaran, S. , Alimirzalu, S., Nejati-Koshki, K., Nasrabadi, H.T., Akbarzadeh, A., Khandaghi, A.A., Abbasian, M., Alimohammadi, S. Physicochemical characteristics of Fe<sub>3</sub>O<sub>4</sub> magnetic nanocomposites based on poly(N-isopropylacrylamide) for anti-cancer drug delivery. *Asian Pac J Cancer Prev*, Volume 15, Issue 1, 2014, Pages 49-54

27. Ali Eatemadi, Hadis Daraee, Hamzeh Karimkhanloo , Mohammad Kouhi, Nosratollah Zarghami, [Abolfazl Akbarzadeh](#), Younes Hanifehpour, Sang Woo Joo. Carbon Nanotubes : Properties, Synthesis, Purification, and Medical Applications. *Nanoscale Research Letters* 2014, *Nanoscale research letters* 9 (1), 1-13

28. Karnoosh-Yamchi Jalil , Mobasser Majid, [Akbarzadeh Abolfazl](#), Davaran Soodabeh, 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. *Molecular Biology Reports*. 2014, *Molecular biology reports* 41 (10), 6705-6712

---

---

29. Effat Alizadeh, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami, Mohamadreza Baghaban Eslaminejad, Shahryar Hashemzadeh, Kazem Nejati-Koshki. Up-regulation of Liver enriched Transcription Factors (HNF4a and HNF6) and Liver Specific MicroRNA (miR-122) by Inhibition of Let-7b in Mesenchymal Stem Cells. *Chemical biology & drug design*, 2014. 85(5).600-608

30. Kazem Nejati-Koshki, Mehran Mesgari, Eommelbanin Ebrahimi, Alireza Abhari, Sedigeh Fekri Aval, Amir Ahmad Khandaghi, [Abolfazl Akbarzadeh](#). Synthesis and In-vitro study of Cisplatin-loaded Fe<sub>3</sub>O<sub>4</sub> Nanoparticles Modified with PLGA-PEG6000 Copolymers in Treatment of Lung Cancer. *Journal of Microencapsulation*. 2014. *Journal of microencapsulation*, 1-9

31. Effat Alizadeh, Nosratollah Zarghami, MohamadReza Baghaban Eslaminejad, [Abolfazl Akbarzadeh](#), Abolfazl Barzegar, and Seyed Abolghasem Mohammadi. The Effect of Dimethyl Sulfoxide (DMSO) on Hepatic Differentiation of Mesenchymal Stem Cells. *Artificial Cells, Nanomedicine, and Biotechnology*, 2014, *Artificial cells, nanomedicine, and biotechnology*, 1-8

32. Elham Abbasi, [Abolfazl Akbarzadeh](#), Mohammad Kouhi, Morteza Milani. Graphene: Synthesis, Bio-Applications, and Properties. *Artificial Cells, Nanomedicine, and Biotechnology*, 2014, *Artificial cells, nanomedicine, and biotechnology*, 1-7

33. Eommelbanin Ebrahimi, Elham Abbasi, [Abolfazl Akbarzadeh](#), Amir Ahmad Khandaghi, Soodabeh Davaran. Novel Drug Delivery System Based on Doxorubicin-Encapsulated Magnetic Nanoparticles modified with PLGA-PEG1000 copolymer. *Artificial cells, nanomedicine, and biotechnology*, 2014, 1-8

34. Elham Abbasi, Morteza Milani, Sedigeh Fekri Aval, Mohammad Kouhi, [Abolfazl Akbarzadeh](#), Hamid Tayefi Nasrabadi, Parisa Nikasa, San woo joo, Younes Hanifepour, Kazem Nejati-Koshki, Mohammad Samiei. Silver nanoparticles: Synthesis, properties, bio-applications and limitations. *Crit Rev Microbiol*, 2014, *Critical reviews in microbiology*, 1-8

35. Masoud Gandomkar Ghalhar, [Abolfazl Akbarzadeh](#), Mohammad Rahmati, Hassan Mellatyar, Hassan Dariushnejad, Nosratallah Zarghami, Amin Barkhordari. Comparison of Inhibitory Effects of 17-AAG Nanoparticles and Free 17-AAG on HSP90 Gene Expression in Breast Cancer. *Asian Pacific journal of cancer prevention: APJCP* 2014, 15 (17), 7113

---



---

36.Hadis Daraee, Ali Eatemadi, Elham Abbasi, Sedigheh Fekri Aval, Mohammad Kouhi, [Abolfazl Akbarzadeh](#).Application of gold nanoparticles in biomedical and drug delivery.Artificial cells, nanomedicine, and biotechnology, 2014,1-13

37.Fatemeh Sadat Tabatabaei Mirakabad, [Abolfazl Akbarzadeh](#), Morteza Milani, Nosratollah Zarghami, Mortaza Taheri-Anganeh, Vahideh Zeighamian, Fariba Badrzadeh, Mohammad Rahmati-Yamchi.A Comparison between the cytotoxic effects of pure curcumin and curcumin-loaded PLGA-PEG nanoparticles on the MCF-7 human breast cancer cell line.Artificial cells, nanomedicine, and biotechnology,2014, 1-8

38.H Daraee, A Etemadi, M Kouhi, S Alimirzalu, [A Akbarzadeh](#).Application of liposomes in medicine and drug delivery.Artificial cells, nanomedicine, and biotechnology, 2014,1-11

39.HT Nasrabadi, E Abbasi, S Davaran, M Kouhi, [A Akbarzadeh](#).Bimetallic nanoparticles: Preparation, properties, and biomedical applications.Artificial cells, nanomedicine, and biotechnology,2014, 1-5

40.Jin-Hwan Chung, Young Kyung Kim, Kyo-Han Kim, Tae-Yub Kwon, Seyede Ziba Vaezmomeni, Mohammad Samiei, Marzyeh Aghazadeh, Soodabeh Davaran, Mehrdad Mahkam, Ghale Asadi, [Abolfazl Akbarzadeh](#).Synthesis, characterization, biocompatibility of hydroxyapatite-natural polymers nanocomposites for dentistry applications.Artificial cells, nanomedicine, and biotechnology, 2014,1-8

41.Sedigheh Fekri Aval, [Abolfazl Akbarzadeh](#), Mohammad Rahmati Yamchi, Faraz Zarghami, Kazem Nejati-Koshki, Nosratollah Zarghami.Gene silencing effect of SiRNA-magnetic modified with biodegradable copolymer nanoparticles on hTERT gene expression in lung cancer cell line.Artificial cells, nanomedicine, and biotechnology,2014, 1-6

42.Zohre S, Kazem NK, [Abolfazl A](#), Mohammad RY, Aliakbar M, Effat A, Zahra D, Hassan D, Nosratollah Z.Trichostatin A-induced Apoptosis is Mediated by Kruppel-like Factor 4 in Ovarian and Lung Cancer.Asian Pac J Cancer Prev. 2014;15(16):6581-6.

43.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, 2014; Early Online: 1–6.

---

---

44.Hassan Mellatyar, [Abolfazl Akbarzadeh](#), Mohammad Rahmati, Masoud Gandomkar Ghalhar, Ali Etemadi, Kazem Nejati-Koshki<sup>1</sup>, Nosratallah Zarghami<sup>1</sup>, Amin Barkhordari.Comparison of Inhibitory Effect of 17-DMAG Nanoparticles and Free 17-DMAG in HSP90 Gene Expression in Lung Cancer.Asian Pac J Cancer Prev. APJCP.2014.15.20.8693-8698.

45.Kianoosh Dadashzadeh, Morteza Milani, Mohammad Rahmati, [Abolfazl Akbarzadeh](#), Real-Time PCR Detection of 16S rRNA Novel Mutations Associated with *Helicobacter pylori* Tetracycline Resistance in Iran, Asian Pac J Cancer Prev. APJCP.2014.15.20.8883-8886.

46.Amirbahman Rahimzadeh, Fatemeh Sadat Tabatabaei Mirakabad , Aliakbar Movassaghpour , Karim Shamsasenjan , Saber Karimineko , Mehdi Talebi , Abolfazl Shekari , Vahideh Zeighamian Masoud Gandomkar Ghalhar 7 &[Abolfazl Akbarzadeh](#),Biotechnological and biomedical applications of mesenchymal stem cells as a therapeutic system,Artifi cial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–12

47.Eomolbanin Ebrahimi , Amir Ahmad Khandaghi , Fereshteh Valipour , Soraia Babaie , Fatemeh Asghari , Soheila Motaali , Elham Abbasi , [Abolfazl Akbarzadeh](#)& Soodabeh Davaran .In vitro study and characterization of doxorubicin-loaded magnetic nanoparticles modified with biodegradable copolymers.Artifi cial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–9

48.Fariba Badrzadeh, [Abolfazle Akbarzadeh](#),Nosratollah Zarghami,Mohammad Rahmati Yamchi, Vahide Zeighamian, Fateme Sadate Tabatabae,Morteza Taheri, Hossein Samadi Kafil.Comparison between Effects of Free Curcumin and Curcumin Loaded NIPAAm-MAA Nanoparticles on Telomerase and PinX1 Gene Expression in Lung Cancer Cells. Asian Pac J Cancer Prev. APJCP.2014.15.20.8931-8936.

49.Roya Herizchi , Elham Abbasi , Morteza Milani &[Abolfazl Akbarzadeh](#).Current methods for synthesis of gold nanoparticles.Artifi cial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–7

50.Taiebeh Kafshdooz , Leila Kafshdooz , [Abolfazl Akbarzadeh](#) , Younes Hanifehpour & Sang Woo Joo.Applications of nanoparticle systems in gene delivery and gene therapy.Artifi cial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–7

51.Fariba Badrzadeh, Mohammad Rahmati-Yamchi , Kazem Badrzadeh , Alireza Valizadeh , Nosratollah Zarghami, Samad Mussa Farkhani &[Abolfazl Akbarzadeh](#).Drug delivery and nanodetection in lung cancer.Artifi cial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–17

---

---

52.Nasrin Sohrabi , Alireza Valizadeh , Samad Mussa Farkhani 4 &[Abolfazl Akbarzadeh](#).Basics of DNA biosensors and cancer diagnosis.Artifi cial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–10

53.Tozihi M, Zarghami N, Rahmati M, Nejati-Koshki K, [Akbarzadeh A](#), Mohamadian J, Frahadi B, Kordi Sh.CDH1 and FGFR2 gene Polymorphisms in Breast Cancer Patients.International Journal of Biosciences (IJB) . 2014. *InPress*

54.Afsaneh Shafiei, Reza Haji Hosseini, Mohammad Ali Boroumand, Shayan Ziaee, Nosratolah Zarghami, [Abolfazl Akbarzadeh](#).The Association between Serum KALRN Levels with Polymorphism Gene KALRN (rs9289231) with Risk of Early-Onset Coronary Artery Disease (CAD). Molecular Biology Reports.2014.

55.Kordi Shirafkan, Zarghami Nosratolah, Rahmati Yamchi Mohammad, Ghasemali Somaye ,Tozihi Majid, Nejati-Koshki Kazem, [Akbarzadeh Abolfazl](#).The Comparison of inhibitory effect of nanocapsolated Helenalin and free Helenalin on Telomerase gene expression in breast cancer cell line by Real-time PCR.Molecular Biology Reports.2014. Artificial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–17

56.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. Vol. 4, No. 10, p. 134-145

57.Barkhordari.A, Rahmati Yamchi.M, Fekri S, Pourhassan-Moghaddam.M , Nejati Koshki.K, Davaran.S, [Akbarzadeh.A](#) , Nasiri.M, Zarghami.N, Study of inhibitory effect of Helenalin on hTERT gene expression in breast cancer cell line by Real-time PCR, Bio infopublications, In Press 2014

58.Kianoosh Dadashzadeh, Morteza Milani, Mohammad Rahmati, [Abolfazl Akbarzadeh](#).Real-Time PCR Detection of 16S rRNA Novel Mutations Associated with Helicobacter pylori Tetracycline Resistance in Iran.Asian Pac J Cancer Prev. 2014;15(20):8883-6.

59.Mehrak Zare, Masoud Soleimani, Mozhddeh Mohammadian, [Abolfazl Akbarzadeh](#), Parvaneh Havasi, Nosratollah Zarghami,Efficient biotechnological approach for lentiviral transduction of induced pluripotent stem cells,2014,Artificial Cells, Nanomedicine, and Biotechnology, 2014,1-6.

---

---

60.Zare M, Soleimani M, [Akbarzadeh A](#), Bakhshandeh B, Aghae-Bakhtiari SH, Mohammadian M, Zarghami N.A Novel Protocol to Differentiate Induced Pluripotent Stem Cells by Neuronal microRNAs to Provide a Suitable Cellular Model.Chem Biol Drug Des. 2014 Nov 27.

61.Shirafkan Kordi, Nosratolah Zarghami, [Abolfazl Akbarzadeh](#), Yamchi Mohammad Rahmati,Somaye Ghasemali, Amin Barkhordari1 & Majid Tozihi.A comparison of the inhibitory effect of nano-encapsulated helenalin and free helenalin on telomerase gene expression in the breast cancer cell line, by real-time PCR.Artificial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–9

62.Sima Majidi , Fatemeh Zeinali Sehrig , Samad Mussa Farkhani , Mehdi Soleymani Goloujeh , [Abolfazl Akbarzadeh](#) .Current methods for synthesis of magnetic nanoparticles.Artificial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–13

63.Mehrak Zare, Masoud Soleimani, Mozhdeh Mohammadian, [Abolfazl Akbarzadeh](#), Parvaneh Havasi , Nosratollah Zarghami,Efficient biotechnological approach for lentiviral transduction of induced pluripotent stem cells.Artificial Cells, Nanomedicine, and Biotechnology, 2014; Early Online: 1–6

64.Aliyari Z, Khaziri N, Brazvan B, Saayah Melli M, Tayefi Nasrabadi H, [Akbarzadeh A](#), Nozad Charoudeh H.Key immune cell cytokines have a significant role in the expansion of CD26 population of cord blood mononuclear cells.Artif Cells Nanomed Biotechnol. 2015 Jun 4:1-8. [Epub ahead of print]

65.Gholizadeh-Ghaleh Aziz S, Gholizadeh-Ghaleh Aziz S, [Akbarzadeh A](#).The potential of nanofibers in tissue engineering and stem cell therapy.Artif Cells Nanomed Biotechnol. 2015 Jun 4:1-6. [Epub ahead of print]

66.Mohammadinejad S, [Akbarzadeh A](#), Rahmati-Yamchi M, Hatam S, Kachalaki S, Zohreh S, Zarghami N.Preparation and Evaluation of Chrysin Encapsulated in PLGA- PEG Nanoparticles in the T47-D Breast Cancer Cell Line.Asian Pac J Cancer Prev. 2015;16(9):3753-8.

67.Ranji P, [Akbarzadeh A](#), Rahmati-Yamchi M.Associations of Probiotics with Vitamin D and Leptin Receptors and their Effects on Colon Cancer.Asian Pac J Cancer Prev. 2015;16(9):3621-7.

---

---

68.Fakhravar Z, Ebrahimnejad P, Daraee H, [Akbarzadeh A](#).Nanoliposomes: Synthesis Methods and Applications in Cosmetics.J Cosmet Laser Ther. 2015 May 12:1-31. [Epub ahead of print]

69.Shahmohammadi MR, Nahaei MR, [Akbarzadeh A](#), Milani M.Shahmohammadi MR, Nahaei MR, Akbarzadeh A, Milani M.Artif Cells Nanomed Biotechnol. 2015 May 7:1-5. [Epub ahead of print]

70.Pilehvar-Soltanahmadi Y, [Akbarzadeh A](#), Moazzez-Lalaklo N, Zarghami N.An update on clinical applications of electrospun nanofibers for skin bioengineering.Artif Cells Nanomed Biotechnol. 2015 May 5:1-15. [Epub ahead of print]

71.Daraee H, Pourhassanmoghadam M, [Akbarzadeh A](#), Zarghami N, Rahmati-Yamchi M.Gold nanoparticle-oligonucleotide conjugate to detect the sequence of lung cancer biomarker.Artif Cells Nanomed Biotechnol. 2015 Apr 17:1-7. [Epub ahead of print]

72.Kafshdooz L, Kafshdooz T, Razban Z, [Akbarzadeh A](#).The application of gold nanoparticles as a promising therapeutic approach in breast and ovarian cancer.Artif Cells Nanomed Biotechnol. 2015 Apr 14:1-6. [Epub ahead of print]

73.Tayefi Nasrabadi H, Gavami M, [Akbarzadeh A](#), Beheshti R, Mohammadnejad D, Abedelahi A.Preservation of mouse ovarian tissue follicle morphology and ultra-structure after vitrifying in biotechnological protocols.J Ovarian Res. 2015 Mar 6;8(1):7. doi: 10.1186/s13048-015-0137-3.

74.Kurd K, Khandagi AA, Davaran S, [Akbarzadeh A](#).Cisplatin release from dual-responsive magnetic nanocomposites.Artif Cells Nanomed Biotechnol. 2015 Mar 30:1-9. [Epub ahead of print]

75.Zeighamian V, Darabi M, [Akbarzadeh A](#), Rahmati-Yamchi M, Zarghami N, Badrzadeh F, Salehi R, Tabatabaei Mirakabad FS, Taheri-Anganeh M.PNIPAAm-MAA nanoparticles as delivery vehicles for curcumin against MCF-7 breast cancer cells.Artif Cells Nanomed Biotechnol. 2015 Mar 2:1-8. [Epub ahead of print].

76.Eatemadi A, Darabi M, Afraidooni L, Zarghami N, Daraee H, Eskandari L, Mellatyar H, [Akbarzadeh A](#).Comparison, synthesis and evaluation of anticancer drug-loaded polymeric nanoparticles on breast cancer cell lines.Artif Cells Nanomed Biotechnol. 2015 Feb 24:1-10. [Epub ahead of print]

---

---

77. Milani M, Sharifi Y, Rahmati-Yamchi M, Somi MH, [Akbarzadeh A](#). Immunology and vaccines and nanovaccines for Helicobacter pylori infection. *Expert Rev Vaccines*. 2015 Jun;14(6):833-40. doi: 10.1586/14760584.2015.1008460. Epub 2015 Feb 3.

78. Abbasi E, Kafshdooz T, Bakhtiary M, Nikzamir N, Nikzamir N, Nikzamir M, Mohammadian M, [Akbarzadeh A](#). Biomedical and biological applications of quantum dots. *Artif Cells Nanomed Biotechnol*. 2015 Jan 23:1-7. [Epub ahead of print]

79. Zeinali Sehrig F, Majidi S, Nikzamir N, Nikzamir N, Nikzamir M, [Akbarzadeh A](#). Magnetic nanoparticles as potential candidates for biomedical and biological applications. *Artif Cells Nanomed Biotechnol*. 2015 Jan 23:1-10. [Epub ahead of print]

80. Kafshdooz L, Tabrizi AD, Mohaddes SM, Kafshdooz T, [Akbarzadeh A](#), Ghojzadeh M, Gharesouran J. The polymorphism of hypoxia-inducible factor-1a gene in endometrial cancer. *Asian Pac J Cancer Prev*. 2014;15(23):10393-6.

81. Kordi S, Zarghami N, [Akbarzadeh A](#), Rahmati YM, Ghasemali S, Barkhordari A, Tozihi M. A comparison of the inhibitory effect of nano-encapsulated helenalin and free helenalin on telomerase gene expression in the breast cancer cell line, by real-time PCR. *Artif Cells Nanomed Biotechnol*. 2014 Dec 1:1-9. [Epub ahead of print]

82. Majidi S, Zeinali Sehrig F, Farkhani SM, Soleymani Goloujeh M, [Akbarzadeh A](#). Current methods for synthesis of magnetic nanoparticles. *Artif Cells Nanomed Biotechnol*. 2014 Dec 1:1-13. [Epub ahead of print]

83. Elham Anari, [Abolfazl Akbarzadeh](#) & Nosratollah Zarghami, Chrysin-loaded PLGA-PEG nanoparticles designed for enhanced effect on the breast cancer cell line. *Artificial Cells, Nanomedicine, and Biotechnology*, 2015; Early Online: 1-7

84. Mozhdeh Mohammadian, Elham Abasi & [Abolfazl Akbarzadeh](#), Mesenchymal stem cell-based gene therapy: A promising therapeutic strategy. *Artificial Cells, Nanomedicine, and Biotechnology*, 2015; Early Online: 1-6

85. Mohammadreza Alizadeh-Ghodsi, Ali Zavari-Nematabad, Hamed Hamishehkar, [Abolfazl Akbarzadeh](#) b,c, Tohid Mahmoudi-Badiki, Faraz Zarghami, Mohammad Pourhassan Moghaddam, Esmaeel Alipour, Nosratollah

---

---

Zarghami. Design and development of PCR-free highly sensitive electrochemical assay for detection of telomerase activity using Nano-based (liposomal) signal amplification platform. *Biosensors and Bioelectronics* 80 (2016) 426–432

86. Rahmati-Yamchi M, Zarghami N, Nozad Charoudeh H, Ahmadi Y, Baradaran B, Khalaj-Kondori M, Milani M, [Akbarzadeh A](#), Shaker M, Pourhassan-Moghaddam M. Clofarabine Has Apoptotic Effect on T47D Breast Cancer Cell Line via P53R2 Gene Expression. *Adv Pharm Bull.* 2015 Nov;5(4):471-6.

87. Gorjikhah F, Davaran S, Salehi R, Bakhtiari M, Hasanzadeh A, Panahi Y, Emamverdy M, [Akbarzadeh A](#). Improving "lab-on-a-chip" techniques using biomedical nanotechnology: a review. *Artif Cells Nanomed Biotechnol.* 2016 Jan 13:1-6. [Epub ahead of print]

88. Karimineko S, Movassaghpour A, Rahimzadeh A, Talebi M, Shamsasenjan K, [Akbarzadeh A](#). Implications of mesenchymal stem cells in regenerative medicine. *Artif Cells Nanomed Biotechnol.* 2016 Jan 13:1-9. [Epub ahead of print]

89. Niri NM, Hadjati J, Sadat M, Memarnejadian A, Aghasadeghi M, [Akbarzadeh A](#), Zarghami N. Inducing Humoral Immune Responses Against Regulatory T Cells by Foxp3-Fc(IgG) Fusion Protein. *Monoclon Antib Immunodiagn Immunother.* 2015 Dec;34(6):381-5.

90. Ahmadi-Aghkand F, Gholizadeh-Ghaleh Aziz S, Panahi Y, Daraee H, Gorjikhah F, Gholizadeh-Ghaleh Aziz S, Hsanzadeh A, [Akbarzadeh A](#). Recent prospective of nanofiber scaffolds fabrication approaches for skin regeneration. *Artif Cells Nanomed Biotechnol.* 2015 Dec 3:1-7. [Epub ahead of print]

91. Kafshdooz T, Mohaddes Ardabili SM, Kafshdooz L, Tabrizi AD, Ghojazadeh M, Gharesouran J, [Akbarzadeh A](#). C-kit Mutations in Endometrial Cancer: Correlation with Tumor Histologic Type. *Asian Pac J Cancer Prev.* 2015;16(17):7449-52.

92. Askari S, Salehi R, Zarghami N, [Akbarzadeh A](#), Rahmati-Yamchi M. The anticancer effects of biodegradable nanomagnetic dual natural components on the leptin gene expression in lung cancer. *Artif Cells Nanomed Biotechnol.* 2015 Nov 22:1-11. [Epub ahead of print].

93. Zeinali Sehrig F, Majidi S, Asvadi S, Hsanzadeh A, Rasta SH, Emamverdy M, Akbarzadeh J, Jahangiri S, Farahkhiz S, [Akbarzadeh A](#). An update on clinical applications of magnetic nanoparticles for increasing the resolution of magnetic resonance imaging. *Artif Cells Nanomed Biotechnol.* 2015 Nov 19:1-6.

---

- 
94. Jahanban-Esfahlan R, Abasi M, Sani HM, Abbasi MM, [Akbarzadeh A](#). Anti-Proliferative Effects of Hesa-A on Human Cancer Cells with Different Metastatic Potential. *Asian Pac J Cancer Prev*. 2015;16(16):6963-6.
95. Jahangiri S, [Akbarzadeh A](#). Preparation and in vitro evaluation of Methotrexate-loaded magnetic nanoparticles modified with biocompatible copolymers. *Artif Cells Nanomed Biotechnol*. 2015 Oct 19:1-8. [Epub ahead of print]
96. Alizadeh E, Eslaminejad MB, [Akbarzadeh A](#), Sadeghi Z, Abasi M, Herizchi R, Zarghami N. Upregulation of MiR-122 via Trichostatin A Treatments in Hepatocyte-like Cells Derived from Mesenchymal Stem Cells. *Chem Biol Drug Des*. 2016 Feb;87(2):296-305. doi: 10.1111/cbdd.12664. Epub 2015 Oct 19.
97. Safari F, Tamaddon AM, Zarghami N, Abolmali S, [Akbarzadeh A](#). Polyelectrolyte complexes of hTERT siRNA and polyethyleneimine: Effect of degree of PEG grafting on biological and cellular activity. *Artif Cells Nanomed Biotechnol*. 2015 Jul 31:1-8. [Epub ahead of print]
98. M Zarouni, R Salehi, [A Akbarzadeh](#), N Samadi, S Davaran, F Ramezani, 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*. 64,14,718-726.
99. S Askari, R Salehi, N Zarghami, [A Akbarzadeh](#), M Rahmati-yamchi. The anticancer effects of biodegradable nanomagnetic dual natural components on the leptin gene expression in lung cancer. *Artificial cells, nanomedicine, and biotechnology*, 1-11.
100. Asghari F, Samiei M, Adibkia K, [Akbarzadeh A](#), Davaran S. Biodegradable and biocompatible polymers for tissue engineering application: a review. *Artif Cells Nanomed Biotechnol*. 2016 Feb 28:1-8. [Epub ahead of print]
101. Alizadeh-Ghods M, Zavari-Nematabad A, Hamishehkar H, [Akbarzadeh A](#), Mahmoudi-Badiki T, Zarghami F, Pourhassan Moghaddam M, Alipour E, Zarghami N. Design and development of PCR-free highly sensitive electrochemical assay for detection of telomerase activity using Nano-based (liposomal) signal amplification platform. *Biosens Bioelectron*. 2016 Jun 15;80:426-32.
-



---

102.Neda Mousavi Niri, Arash Memarnejadian, Jamshid Hadjati, Mohammad Reza Aghasadeghi, Mehdi Shokri, Yones Pilehvar-soltanahmadi, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami. Construction and Production of Foxp3-Fc (IgG) DNA Vaccine/Fusion Protein. Avicenna Journal of Medical Biotechnology, 2016, 8, 2: 57-64

103. Mostafa Heidari Majd, [Abolfazl Akbarzadeh](#), and Azam Sargazi. Evaluation of host-guest system to enhance the tamoxifen efficiency. Artif Cells Nanomed Biotechnol. 2016 .

104. Majid Mohammadhosseini, [Abolfazl Akbarzadeh](#), Hamid Hashemi Moghaddam, Abdorreza Mohammadi Nafchi, Hossein Ali Mashayekhi & Ahmad Aryanpour. Chemical Composition of the Essential Oils from the Aerial Parts of Artemisia sieberi by Using Conventional Hydrodistillation and Microwave Assisted Hydrodistillation: A Comparative Study. TEOP 19 (1) 2016 pp 32 - 45

105. Fatemeh Gorjikhah, Farid Azizi Jalalian, Roya Salehi, Yunes Panahi, A Hasanzadeh, Effat Alizadeh, [Abolfazl Akbarzadeh](#), and Soodabeh Davaran. Preparation and characterization of PLGA-CD polymeric nanoparticles containing methotrexate and evaluation of their effects on T47D cell line. Artif Cells Nanomed Biotechnol. 2016 .

106. Sonia Fathi Karkan, Majid Mohammadhosseini, Yunes Panahi, Morteza Milani, Nosratollah Zarghami, [Abolfazl Akbarzadeh](#), Elham Abasi, Arastoo Hosseini, and Soodabeh Davaran. Magnetic nanoparticles in cancer diagnosis and treatment: a review. Artif Cells Nanomed Biotechnol. 2016 .

107. Leila Eskandari, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami & Mohammad Rahmati-Yamchi. Gold nanoprobe based method for sensing Activated Leukocyte Cell Adhesion Molecule (ALCAM) gene expression, as a breast cancer biomarker. Artif Cells Nanomed Biotechnol. 2016 Feb 28:1-6. [Epub ahead of print]

108. Saber Karimineko, Aliakbar Movassaghpour, Amirbahman Rahimzadeh, Mehdi Talebi, Karim Shamsasenjan & [Abolfazl Akbarzadeh](#). Implications of mesenchymal stem cells in regenerative medicine, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

109. 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

110. Soheila Motaali, Maryam Pashaeiasl, [Abolfazl Akbarzadeh](#) & Soodabeh Davaran. Synthesis and characterization of smart N-isopropylacrylamide-based magnetic nanocomposites containing doxorubicin anticancer drug, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

---

---

111.Saeid Shabestari Khiabani, Masoud Farshbaf, [Abolfazl Akbarzadeh](#) & Soodabeh Davaran, Magnetic nanoparticles: preparation methods, applications in cancer diagnosis and cancer therapy. ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

112.Farideh Mohammadian, Alireza Abhari, Kazem Nejati-Koshki & [Abolfazl Akbarzadeh](#), New state of nanofibers in regenerative medicine, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

113.Fatemeh Asghari, Roya Salehi, Marziyeh Agazadeh, Effat Alizadeh, Khosro Adibkia, Mohammad Samiei, [Abolfazl Akbarzadeh](#), Negar Abbasi Aval & Soodabeh Davaran, The Odontogenic Differentiation of Human Dental Pulp Stem Cells on Hydroxyapatite-coated Biodegradable Nanofibrous Scaffolds, International Journal of Polymeric Materials and Polymeric Biomaterials, 2016

114.Nahideh Asadi, Soodabeh Davaran, Yunes Panahi, Arash Hasanzadeh, Javad Malakootikhah, Hadi Fallah Moafi & [Abolfazl Akbarzadeh](#), Application of nanostructured drug delivery systems in immunotherapy of cancer: a review, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

115. [Abolfazl Akbarzadeh](#), Elham Abasi, Mostafa Ghanei, Arash Hasanzadeh & Yunes Panahi, The effects of various chemicals on lung, skin and eye: a review, Toxin Rev, Early Online: 1–9

116.Hassan Mellatyar, Sona Talaei, Kazem Nejati-Koshki, [Abolfazl Akbarzadeh](#), Targeting HSP90 Gene Expression with 17-DMAG Nanoparticles in Breast Cancer Cells, APJCP.2016.17.5.2453-57

117.Mohammad Khalaj-Kondori, Mohammad Rahmati-Yamchi, Habib Onori, Davood Fazli, [Abolfazl Akbarzadeh](#), A Novel Dominant Missense Mutation, I20F, in the GJB2 Gene Causes Sporadic Nonsyndromic Sensorineural Hearing Loss, Adv. Biores., Vol 7 (3) May 2016: 05-09

118.Momeni-Javid Zahra, Hamishekar Hamed, Rahmati-Yamchi Mohammad, Zarghami Nosratollah, [Abolfazl Akbarzadeh](#) & Milani Morteza, Evaluation and study of antimicrobial activity of nanoliposomal meropenem against Pseudomonas aeruginosa isolates, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

119.Hadi Eftekhari, Alireza Jahandideh, Ahmad Asghari, [Abolfazl Akbarzadeh](#) & Saeed Hesaraki, Assessment of polycaprolacton (PCL) nanocomposite scaffold compared with hydroxyapatite (HA) on healing of segmental femur bone defect in rabbits, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016

---

---

120. Majid Mohammadhosseini, [Abolfazl Akbarzadeh](#), Hamid Hashemi-Moghaddam, Mahdiyeh Shahnama, Bijan Fahimi and Somayeh Azami, Gas Chromatographic-Mass Spectrometric Analysis of Volatiles Obtained by HS-SPME-GC-MS Technique from Aerial Parts of *Ziziphora capitata* L., and Evaluation for Biological Activity, *Orient. J. Chem.*, Vol. 32(3), 1439-1451 (2016)

121. Karnoosh-Yamchi J, Rahmati-Yamchi M, [Akbarzadeh A](#), Davaran S, Ostad Rahimi AR, Garnoosh K, Bahmani Z, Ashoori M, Mobasser M. pH sensitive insulin-loaded nanohydrogel increases the effect of oral insulin in diabetic rats. *Artif Cells Nanomed Biotechnol.* 2016 Aug 18:1-5.

122. Naseri M, [Akbarzadeh A](#), Spotin A, Akbari NA, Mahami-Oskouei M, Ahmadpour E. Scolicidal and apoptotic activities of albendazole sulfoxide and albendazole sulfoxide-loaded PLGA-PEG as a novel nanopolymeric particle against *Echinococcus granulosus* protoscoleces. *Parasitol Res.* 2016 Sep 14.

123. Aberoumandi SM, Mohammadhosseini M, Abasi E, Saghati S, Nikzamir N, [Akbarzadeh A](#), Panahi Y, Davaran S. An update on applications of nanostructured drug delivery systems in cancer therapy: a review. *Artif Cells Nanomed Biotechnol.* 2016 Sep 15:1-11.

124. Y. Panahi, M. Mohammadhosseini, A. J. N. Abadi, [A. Akbarzadeh](#), H. Mellatyar. An Update on Biomedical Application of Nanotechnology for Alzheimer's Disease Diagnosis and Therapy. *DrugRes/2016-07-1236/4.8.2016/MPS* .

125. E. Izadi, A. Rasooli, [A. Akbarzadeh](#), S. Davaran. Preparation and Characterization of Gold Nanoparticles in the Presence of Citrate and Soybean Seed Extract in an Acidic Conditions. *DrugRes/2016-06-1219/9.8.2016/MPS* .

126. Soodabeh Khalili, Mahmoud Shekari Khaniani, Naser Aghamohammadzade, [Abolfazl Akbarzadeh](#) and Sima Mansoori Derakhshan<sup>1</sup>, The Association of Nucleobindin 2 Gene (NUCB2) Variants with Type 2 Diabetes Mellitus Among Iranian Azeri-Turkish Population, *BIOSCIENCES BIOTECHNOLOGY RESEARCH ASIA*, September 2016.

127. Saeideh Abdolapour, Nejat Mahdieh, Zahra Jamali, [Abolfazl Akbarzadeh](#), Tayebeh Toliyat, Maliheh Paknejad. Development of Doxorubicin-Loaded Nanostructured Lipid Carriers: Preparation, Characterization, and In Vitro Evaluation on MCF-7 Cell Line. *BioNanoSci.* 2017

---

---

128.Nahideh Asadi , Soodabeh Davaran , Yunes Panahi, Arash Hasanzadeh , Javad Malakootikhah, Hadi Fallah Moafir and [Abolfazl Akbarzadeh](#). Application of nanostructured drug delivery systems in immunotherapy of cancer: a review, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2017

VOL. 45, NO. 1, 18–23

129.Saeid Shabestari Khiabani, Masoud Farshbaf, [Abolfazl Akbarzadeh](#) and Soodabeh Davaran, Magnetic nanoparticles: preparation methods, applications in cancer diagnosis and cancer therapy. ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2017, VOL. 45, NO. 1, 6–17

130.Sonia Fathi Karkan, Majid Mohammadhosseini, Yunes Panahi, Morteza Milani, Nosratollah Zarghami, [Abolfazl Akbarzadeh](#), Elham Abasi, Arastoo Hosseini and Soodabeh Davaran. Magnetic nanoparticles in cancer diagnosis and treatment: a review. ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2017 VOL. 45, NO. 1, 1–5

131.Amir Mehdizadeh, Mohammad Hossein Somi, Masoud Darabi, Safar Farajnia, [Abolfazl Akbarzadeh](#), Soheila Montazersaheb, Mehdi Yousefi & Mortaza Bonyad. Liposome-mediated RNA interference delivery against Erk1 and Erk2 does not equally promote chemosensitivity in human hepatocellular carcinoma cell line HepG2. ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2017

132.Ramin Nasimi Doost Azgom , [Abolfazl Akbarzadeh](#), Fatemeh Ebrahimi, Zoleikha Khoshbakht And Arezoo Moini Jazani. Sanoon: A Specialized Dosage form for Dental Diseases in Traditional Persian Medicine. Biomedical & Pharmacology Journal Vol. 9(3), 1171-1182 (2016).

133.Sharif Kaamyabia, Abed Badrianb and [Abolfazl Akbarzadeh](#). Synthesis of Cross-linked Poly (N-isopropylacrylamide) Magnetic Nano Composite for Application in the Controlled Release of Doxorubicin. Pharmaceutical Nanotechnology, 2017, 5, 1-11

134.Fatemeh Asghari, Mohammad Samiei, Khosro Adibkia, [Abolfazl Akbarzadeh](#) & Soodabeh Davaran. Biodegradable and biocompatible polymers for tissue engineering application: a review. Artificial Cells, Nanomedicine, And Biotechnology, 2017 VOL. 45, NO. 2, 185–192

---

---

135. Leila Eskandari, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami & Mohammad Rahmati-Yamchi. Gold nanoprobe-based method for sensing activated leukocyte cell adhesion molecule (ALCAM) gene expression, as a breast cancer Biomarker, *Artificial Cells, Nanomedicine, And Biotechnology*, 2017, VOL. 45, NO. 2, 277–282

136. Farideh Mohammadian, Alireza Abhari, Kazem Nejati-Koshki & [Abolfazl Akbarzadeh](#), New state of nanofibers in regenerative medicine, *Artificial Cells, Nanomedicine, And Biotechnology*, 2017, VOL. 45, NO. 2, 204–210

137. Majid Mohammadhosseini, Satyajit D. Sarker, [Abolfazl Akbarzadeh](#) Chemical composition of the essential oils and extracts of Achillea species and their biological activities: A review, *Journal of Ethnopharmacology* 199 (2017) 257–315

138. Mostafa Heidari Majd, [Abolfazl Akbarzadeh](#) & Azam Sargazi, Evaluation of host–guest system to enhance the tamoxifen efficiency. *Artificial Cells, Nanomedicine, And Biotechnology*, 2017, VOL. 45, NO. 3, 441–447

139. Fatemeh Gorjikhah, Farid Azizi Jalalian, Roya Salehi, Yunes Panahi, Arash Hasanzadeh, Effat Alizadeh, [Abolfazl Akbarzadeh](#) & Soodabeh Davaran, 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*, 2017 VOL. 45, NO. 3, 432–440

140. Soheila Motaali, Maryam Pashaeiasl, [Abolfazl Akbarzadeh](#) & Soodabeh Davaran, Synthesis and characterization of smart N-isopropylacrylamide-based magnetic nanocomposites containing doxorubicin anti cancer drug, *Artificial Cells, Nanomedicine, And Biotechnology*, 2017 VOL. 45, NO. 3, 560–567

141. T. Kafshdooz<sup>1</sup>, [A. Akbarzadeh](#), A. Majdi Seghinsara<sup>3</sup>, M. pourhassan<sup>4</sup>, H. T. Nasrabadi<sup>3</sup>, M. Milani, Role of Probiotics in Managing of Helicobacter Pylori Infection: A Review. *Drug Res* 2017

142. Shiva Gholizadeh-Ghaleh Aziz<sup>1</sup>, Sara Gholizadeh-Ghaleh Aziz, [Abolfazl Akbarzadeh](#). Advances in Silver Nanotechnology: An Update on Biomedical Applications and Future Perspectives. *Drug Res* 2017

143. B. Khalandi, N. Asadi, M. Milani, S. Davaran, A. J. N. Abadi, E. Abasi, [A. Akbarzadeh](#). A Review on Potential Role of Silver Nanoparticles and Possible Mechanisms of their Actions on Bacteria, *Drug Res* 2017

---

- 
144. Y. Panahi, M. Mohammadhosseini, K. Nejati-Koshki, A. J. N. Abadi, H. F. Moafi, [A. Akbarzadeh](#), M. Farshbaf. Preparation, Surface Properties, and Therapeutic Applications of Gold Nanoparticles in Biomedicine. Drug Res 2017
145. Ebrahim Izadi, Ali Rasooli, [Abolfazl Akbarzadeh](#), Soodabeh Davaran. Preparation and Characterization of Gold Nanoparticles in the Presence of Citrate and Soybean Seed Extract in an Acidic Conditions. Drug Res 2017
146. Momeni-Javid Zahra, Hamishekar Hamed, Rahmati-Yamchi Mohammad, Zarghami Nosratollah, [Abolfazl Akbarzadeh](#) & Milani Morteza. Evaluation and study of antimicrobial activity of nanoliposomal meropenem against Pseudomonas aeruginosa isolates. ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2016
147. Zoheyr Mohammadi, Mohsen Sharif Zak, Khaled Seidi, Meisam Barati, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami. The Effect of Chrysin Loaded PLGA-PEG on Metalloproteinase Gene Expression in Mouse 4T1 Tumor Model. Drug Res 2017
148. Lida Ahmadkhani, Ali Baghban, Shahram Mohammadpoor, Rovshan Khalilov, [Abolfazl Akbarzadeh](#), Taras Kavetsky, Siamak Saghfi, Aygun N. Nasibova. Synthesis and Evaluation of a Triblock Copolymer/ZnO Nanoparticles from Poly( $\epsilon$ -caprolactone) and Poly(Acrylic Acid) as a Potential Drug Delivery Carrier. Drug Res 2017
149. Majid Mohammadhosseini, Satyajit D. Sarker, [Abolfazl Akbarzadeh](#). Chemical composition of the essential oils and extracts of Achillea species and their biological activities: A review, Journal of Ethnopharmacology 199 (2017) 257–315
150. M. Khatamian, A. Yavari, [A. Akbarzadeh](#), E. Alizadeh, Synthesis and characterization of MFI-type borosilicate zeolite and evaluation of their efficiency as drug delivery systems. Materials Science & Engineering C, 2017
151. Majid Mohammadhosseini, [Abolfazl Akbarzadeh](#) and Guido Flamini, Profiling of Compositions of Essential Oils and Volatiles of Salvia limbata Using Traditional and Advanced Techniques and Evaluation for Biological Activities of Their Extracts, Chem Biodivers. 2017 Mar 8
152. Sahar Mehranfar, Sirous Zeinali, Rana Hosseini, Mozhdeh Mohammadian, [Abolfazl Akbarzadeh](#), Abbasali Hosein Pour Feizi, History of Leukemia: Diagnosis and Treatment from Beginning to Now, GMJ. 2017;6(1):12-22
-

---

153. Ali Hossein Mesgarzadeh<sup>1</sup>, [Abolfazl Akbarzadeh](#), Ali Rasipour<sup>1</sup>, Tannaz Rasipour<sup>1</sup>, Amir Mehdizadeh, Secretary phospholipase-A2 and fatty acid composition in oral reactive lesions: a cross-sectional study. Mesgarzadeh et al. Cancer Cell Int Cancer cell international ,2017, 17 (1), 50

154. Kazem Golchin, Jafar Golchin, Shahrooz Ghaderi, Neda Alidadiani, Sajjad Eslamkhah, Masoud Eslamkhah and [Abolfazl Akbarzadeh](#). Gold nanoparticles applications: from artificial enzyme till drug delivery, Artificial Cells, Nanomedicine, And Biotechnology, 2017.

155. [Abolfazl Akbarzadeh](#), Leila Kafshdooz, Zohre Razban, Ali Dastranj Tbrizi, Shadi Rasoulpour, Rovshan Khalilov, Taras Kavetsky, Siamak Saghi, Aygun N. Nasibova, Sharif Kaamyabi and Taiebeh Kafshdooz. An overview application of silver nanoparticles in inhibition of herpes simplex virus, ARTIFICIAL CELLS, NANOMEDICINE, AND BIOTECHNOLOGY, 2017

156. Jafar Golchin, Kazem Golchin, Neda Alidadian, Shahrooz Ghaderi, Sajjad Eslamkhah, Masoud Eslamkhah and [Abolfazl Akbarzadeh](#). Nanozyme applications in biology and medicine: an overview. Artificial Cells, Nanomedicine, And Biotechnology, 2017

157. Zahra Shakoori, Hossein Ghanbari, Yadollah Omidi, Maryam Pashaiasl, [Abolfazl Akbarzadeh](#), Zohreh Jomeh Farsangi, Seyed Mahdi Rezayat and Soodabeh Davaran. Fluorescent multi-responsive cross-linked P(N-isopropylacrylamide)-based nanocomposites for cisplatin delivery. DRUG DEVELOPMENT AND INDUSTRIAL PHARMACY, 2017

158. M. kouhi, A. Vahedi, [A. Akbarzadeh](#). Study of nonlinear optical susceptibility of defective shell spherical quantum dot,Optik 2017

159. Yunes Panahi, Majid Mohammadhosseini, Kazem Nejati-Koshki, Azam Jafari Najaf Abadi, Hadi Fallah Moafi, [Abolfazl Akbarzadeh](#), Masoud Farshbaf, Preparation, surface properties, and therapeutic applications of gold nanoparticles in biomedicine, Drug research, 2017, 11 (02), 77-87

160. HA Hoseinzadeh, A Asghari, G Abedi, [A Akbarzadeh](#), R Sedaghat, Effect of Nano-Capsules Containing Risedronate on Calvarial Bone Formation in Rabbit: Radiography and Biochemical Investigation, Crescent Journal of Medical and Biological Sciences, 2018, 5 (1), 29-33

---

---

161.F Nikpour, H Tayefi, D Mohammadnejad, [A Akbarzadeh](#), Adverse Effects of Vincristine Chemotherapy on Cell Changes in Seminiferous Tubules and Cetrorelix GnRH Antagonist Inhibitory Effects in Mice, Asian Pacific journal of cancer prevention: 2018, APJCP 19 (3), 683

162.Rovshan Khalilov Gudivada Parida, Siamak Saghfi, Alireza Eivazi, [Abolfazl Akbarzadeh](#), Taras Kavetsky, Immi Aliyeva, Study Of Genetic Advance And Broad Sense Heritability For Grain Yield And Yield Components Of Chickpea (Cicer Arietinum L.) Genotypes, Advances in Biology & Earth Sciences, 2018, Vol.3, No.1, 2018, pp.5-12 3 (1), 5-12

163.RK Gudivada Parida, Siamak Saghfi, [Abolfazl Akbarzadeh](#), Alireza Eivazi, Comparison Chickpea (Cicerarietinum L) Genotypes And Analysis Of Yield Performance For Drought Conditions, Advances in Biology & Earth Sciences Vol.2, No.3, 2018, pp.348-360 2 (348-360)

164.TS Kavetsky, RI Khalilov, OO Voloshanska, LM Kropyvnytska, TM Beyba, VA Serezhenkov, AN Nasibova, [A Akbarzadeh](#), S Ya Voloshanska, Self-Organized Magnetic Nanoparticles in Plant Systems: ESR Detection and Perspectives for Biomedical Applications, Advanced Nanotechnologies for Detection and Defence against CBRN Agents, 2018, 487-492

165.AA Yunes Panahi, Hassan Mellatyar, Masoud Farshbaf, Ziba Sabet, Tannaz Fattahi, [Abolfazl Albarzadeh](#), Biotechnological applications of nanomaterials for air pollution and water/wastewater treatment, Materials Today: Proceedings, 2018, 5 (7), 1555-1558

166.[Abolfazl Albarzadeh](#) seyed amin mousavi, Antibacterial and antifungal effects of chitosan nanoparticles on tissue conditioners of complete dentures, International Journal of Biological Macromolecules, 2018

167.R Alireza Jahandideh, [Abolfazl Akbarzadeh](#), Ahmad Asghari, Nano composites commonly used in medicine and veterinary, international Journal of Nanotechnology and Nanomedicine, 2018, 2 (1), 1-4

168.[Abolfazl Akbarzadeh](#), Electrospinning: From Basic Research to Commercialization, RSC Book 2018, Chapter 1 (6), 266

169.Peyman Hassanpour, Yunes Panahi, Abbas Ebrahimi-Kalan, [Abolfazl Akbarzadeh](#), Soodabeh Davaran, Aygun N Nasibova, Rovshan Khalilov, Taras Kavetsky, Biomedical applications of aluminium oxide nanoparticles, IET Micro & Nano Letters, 2018, 13 (9), 1227-1231

---



---

170. Morteza Milani, [Abolfazl Akbarzadeh](#), Mohammad H Somi, Prevalence of Helicobacter pylori babA2, babB and oipA genotypes in dyspeptic patients, The Journal of Urmia University of Medical Sciences, 2018, 29 (4), 255-263

171. [Abolfazl Akbarzadeh](#), Rovshan I. Khalilov, Taras S. Kavetsky, Vladimir A. Serezhenkov, Aygun N. Nasibova, Detection Of Manganese-Containing Enzymes And Magnetic Nanoparticles In Juniperus Communis And Related Biomaterials By ESR Spectroscopy, Advances in Biology & Earth Sciences, 2018, 3 (3), 167-175

172. Ava Nasrolahi, Javad Mahmoudi, [Abolfazl Akbarzadeh](#), Mohammad Karimipour, Saeed Sadigh-Eteghad, Roya Salehi, Mehdi Farhoudi, Neurotrophic factors hold promise for the future of Parkinson's disease treatment: is there a light at the end of the tunnel?, Reviews in the neurosciences, 2018

173. Yunes Panahi, Amir Fattahi, Hamid Reza Nejabati, Sina Abroon, Zeinab Latifi, [Abolfazl Akbarzadeh](#), Tohid Ghasemnejad, DNA repair mechanisms in response to genotoxicity of warfare agent sulfur mustard, Environmental toxicology and pharmacology, 2018

174. [Abolfazl Akbarzadeh](#), Leila Kafshdooz, Zohre Razban, Ali Dastranj Tbrizi, Shadi Rasoulpour, Rovshan Khalilov, Taras Kavetsky, Siamak Saghfi, Aygun N Nasibova, Sharif Kaamyabi, Taiebeh Kafshdooz, An overview application of silver nanoparticles in inhibition of herpes simplex virus, Artificial cells, nanomedicine, and biotechnology, 2018, 46 (2), 263-267

175. M Mohseni, A Jahandideh, G Abedi, [A Akbarzadeh](#), S Hesaraki, Assessment of tricalcium phosphate/collagen (TCP/collagene) nanocomposite scaffold compared with hydroxyapatite (HA) on healing of segmental femur bone defect in rabbits, Artificial cells, nanomedicine, and biotechnology, 2018, 46 (2), 242-249

176. Kazem Golchin, Jafar Golchin, Shahrooz Ghaderi, Neda Alidadiani, Sajjad Eslamkhah, Masoud Eslamkhah, Soodabeh Davaran, [Abolfazl Akbarzadeh](#), Gold nanoparticles applications: from artificial enzyme till drug delivery, Artificial cells, nanomedicine, and biotechnology, 2018, 46 (2), 250-254

177. Nahideh Asadi, Nasim Annabi, Ebrahim Mostafavi, Maryam Anzabi, Rovshan Khalilov, Siamak Saghfi, Masoud Mehrzadeh, [Abolfazl Akbarzadeh](#), Synthesis, characterization and in vitro evaluation of magnetic nanoparticles modified with PCL-PEG-PCL for controlled delivery of 5FU, Artificial cells, nanomedicine, and biotechnology, 2018, 1-8

---

---

178.M Bakhtiari, R Salehi, [A Akbarzadeh](#), S Davaran, Development of Novel Doxorubicin Loaded Biodegradable Polymeric Nanofibers as the Anticancer Drug Delivery Systems, *BioNanoScience*, 2018, 8 (1), 60-66

179.M Farshbaf, R Salehi, N Annabi, R Khalilov, [A Akbarzadeh](#), S Davaran, 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, 2018, 44 (3), 452-462

180.Leila Kafshdooz, Hojjat Pourfathi, [Abolfazl Akbarzadeh](#), Taiebeh Kafshdooz, Zohre Razban, Roghayeh Sheervalilou, Naser Ebrahimi Sadr, Rovshan Khalilov, Siamak Saghfi, Taras Kavetskyy, Lala Mammadova, Masoud Mehrizadeh, Samaneh Ghasemali, The role of microRNAs and nanoparticles in ovarian cancer: a review, *Artificial cells, nanomedicine, and biotechnology*, 2018, 1-7

181.N Asadi, E Alizadeh, R Salehi, B Khalandi, S Davaran, [A Akbarzadeh](#), Nanocomposite hydrogels for cartilage tissue engineering: a review, *Artificial cells, nanomedicine, and biotechnology* , 2018, 46 (3), 465-471

182.Ghazal Darfarin, Roya Salehi, Effat Alizadeh, Behnam Nasiri Motlagh, [Abolfazl Akbarzadeh](#), Alireza Farajollahi, The effect of SiO<sub>2</sub>/Au core-shell nanoparticles on breast cancer cell's radiotherapy, *Artificial cells, nanomedicine, and biotechnology*, 2018, 1-11

183.Azizeh Rahmani Del Bakhshayesh, Nasim Annabi, Rovshan Khalilov, [Abolfazl Akbarzadeh](#), Mohammad Samiei, Effat Alizadeh, Mohammadreza Alizadeh-Ghods, Soodabeh Davaran, Azadeh Montaseri, Recent advances on biomedical applications of scaffolds in wound healing and dermal tissue engineering, *Artificial cells, nanomedicine, and biotechnology*, 2018, 46 (4), 691-705

184.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, *Pharmaceutical research*, 2018, 35 (6), 119

185.Hassan Mellatyar, Sona Talaei, Younes Pilehvar-Soltanahmadi, Abolfazl Barzegar, [Abolfazl Akbarzadeh](#), Arman Shahabi, Mazyar Barekati-Mowahed, Nosratollah Zarghami, Targeted cancer therapy through 17-DMAG as an Hsp90 inhibitor: Overview and current state of the art, *Biomedicine & Pharmacotherapy*, 2018, 102, 608-617

---

---

186.F Salimi, KA Dilmaghani, E Alizadeh, [A Akbarzadeh](#), S Davaran,Enhancing cisplatin delivery to hepatocellular carcinoma HepG2 cells using dual sensitive smart nanocomposite,Artificial cells, nanomedicine, and biotechnology,2018, 46 (5), 949-958

187.L Ahmadkhani, [A Akbarzadeh](#), M Abbasian,Development and characterization dual responsive magnetic nanocomposites for targeted drug delivery systems,Artificial cells, nanomedicine, and biotechnology,2018, 46 (5), 1052-1063

188.Morteza Yadi, Ebrahim Mostafavi, Bahram Saleh, Soodabeh Davaran, Immi Aliyeva, Rovshan Khalilov, Mohammad Nikzamir, Nasrin Nikzamir, [Abolfazl Akbarzadeh](#), Yunes Panahi, Morteza Milani,Current developments in green synthesis of metallic nanoparticles using plant extracts: a review,Artificial cells, nanomedicine, and biotechnology,2018, 1-8

189.S Saghati, [Abolfazl Akbarzadeh](#), AR Del Bakhshayesh, R Sheervalilou, Ebrahim Mostafavi,Electrospinning and 3D Printing: Prospects for Market Opportunity,Electrospinning,2018, 136-155

190.Azizeh Rahmani Del Bakhshayesh, Ebrahim Mostafavi, Effat Alizadeh, Nahideh Asadi, [Abolfazl Akbarzadeh](#), Soodabeh Davaran,Fabrication of Three-Dimensional Scaffolds Based on Nano-biomimetic Collagen Hybrid Constructs for Skin Tissue Engineering,ACS Omega,2018, 3 (8), 8605-8611

191.Yunes Panahi, Amir Fattahi, Fatemeh Zarei, Navid Ghasemzadeh, Abbas Mohammadpoor, Sina Abroon, Jafar Nouri Nojaded, Mehran Khojastefard, [Abolfazl Akbarzadeh](#), Tohid Ghasemnejad,Next-generation sequencing approaches for the study of genome and epigenome toxicity induced by sulfur mustard,Archives of toxicology,2018, 1-15

192.H Eftekhari, A Jahandideh, A Asghari, [A Akbarzadeh](#), S Hesaraki,Histopathological evaluation of polycaprolactone nanocomposite compared with tricalcium phosphate in bone healing,Journal of Veterinary Research,2018, 62 (3), 385-394

193.Hassan Mellatyar, Sona Talaei, Younes Pilehvar-Soltanahmadi, Mehdi Dadashpour, Abolfazl Barzegar, [Abolfazl Akbarzadeh](#), Nosratollah Zarghami,17-DMAG-loaded nanofibrous scaffold for effective growth inhibition of lung cancer cells through targeting HSP90 gene expression,Biomedicine & Pharmacotherapy,2018, 105, 1026-1032

---

---

194. [A Akbarzadeh](#), R Khalilov, E Mostafavi, N Annabi, E Abasi, T Kafshdooz, R Herizchi, T Kavetsky, S Saghfi, A Nasibova, S Davaran, Role of dendrimers in advanced drug delivery and biomedical applications: a review, *Experimental oncology*, 2018, 40 (3), 178-183

195. Fatima Pashaei-Asl, Roghiyeh Pashaei-Asl, Khodadad Khodadadi, [Abolfazl Akbarzadeh](#), Esmaeil Ebrahimie, Maryam Pashaiasl, Enhancement of anticancer activity by silibinin and paclitaxel combination on the ovarian cancer, *Artificial cells, nanomedicine, and biotechnology*, 2018, 46 (7), 1483-1487

196. M Farshbaf, S Davaran, F Rahimi, N Annabi, R Salehi, [A Akbarzadeh](#), Carbon quantum dots: recent progresses on synthesis, surface modification and applications, *Artificial cells, nanomedicine, and biotechnology*, 2018, 46 (7), 1331-1348

197. Mehrdad Samadishadlou, Masoud Farshbaf, Nasim Annabi, Taras Kavetsky, Rovshan Khalilov, Siamak Saghfi, [Abolfazl Akbarzadeh](#), Sepideh Mousavi, Magnetic carbon nanotubes: preparation, physical properties, and applications in biomedicine, *Artificial cells, nanomedicine, and biotechnology*, 2018, 46 (7), 1314-1330

198. Masoud Farshbaf, Soodabeh Davaran, Amir Zarebkohan, Nasim Annabi, [Abolfazl Akbarzadeh](#), Roya Salehi, Significant role of cationic polymers in drug delivery systems, *Artificial cells, nanomedicine, and biotechnology*, 2018, 46 (8), 1872-1891

199. Hamed Amani, Ebrahim Mostafavi, Hamidreza Arzaghi, [Abolfazl Akbarzadeh](#), Omid Akhavan, hamidreza Pazoki-Toroudi, Thomas J Webster, Three-dimensional graphene foams: synthesis, properties, biocompatibility, biodegradability, and applications in tissue engineering, *ACS Biomaterials Science & Engineering* 2018

200. NS Aminabad, M Farshbaf, [A Akbarzadeh](#), Recent Advances of Gold Nanoparticles in Biomedical Applications: State of the Art, *Cell Biochemistry and Biophysics*, 2018, 1-15

201. S Talaei, H Mellatyar, Y Pilehvar-Soltanahmadi, A Asadi, [A Akbarzadeh](#), 17-Allylamino-17-demethoxygeldanamycin loaded PCL/PEG nanofibrous scaffold for effective growth inhibition of T47D breast cancer cells, *Journal of Drug Delivery Science and Technology*, 2019, 49, 162-168

202. M Mohammadhosseini, A Venditti, SD Sarker, L Nahar, [A Akbarzadeh](#), The genus *Ferula*: Ethnobotany, phytochemistry and bioactivities—A review, *Industrial Crops and Products*, 2019, 129, 350-394

---

---

---

## Presentations

1. **Abolfazl Akbarzadeh**, Sara Hosseninasab Soodabeh Davaran. Novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. *Iranian Pharmacy student seminar 15-17 october, 2011, Tehran, Iran (Best oralpresentation award)*
  2. **Abolfazl Akbarzadeh**, Davoud Asgari, Soodabeh Davaran. Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible copolymers. *The 5<sup>th</sup> Iranian controlled Release conference of Iran, Masshad 4-6 October, 2011( ICRC 2011)*
  3. **Abolfazl Akbarzadeh**, Davoud Asgari, Soodabeh Davaran. Synthesis, characterization and in vitro evaluation of novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. *The 5<sup>th</sup> Iranian controlled Release conference of Iran, Masshad 4-6 October, 2011(ICRC 2011)*
  4. **Abolfazl Akbarzadeh**, Nosratollah Zarghami, Soodabeh Davaran. Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible co-polymers, accepted for a poster presentation in *PBP world meeting Istanbul, Turkey 19-22 march 2012*
  5. **Abolfazl Akbarzadeh**, Nosratollah Zarghami, Soodabeh Davaran. Novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. ORAL presentation (15 minutes including questions and answers) at the *NanoThailand 2012 conference to be held from April 9 to 11, 2012 at Pullman Raja Orchid Hotel, Khon Kaen, Thailand.*
  6. **Abolfazl Akbarzadeh**, Nosratollah Zarghami, Davoud Asgari, Amir Mohammad Goganian, H. Khaksar Khiabani, Soodabeh Davaran. Synthesis, characterization and in vitro evaluation of novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. *The 2<sup>th</sup> Iranian Nanodrug conference of Iran, Ahwaz 6-9 March, 2012*
  7. **Abolfazl Akbarzadeh**, Nosratollah Zarghami, Soodabeh Davaran. Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible copolymers. (poster presentation) *The 4<sup>th</sup> International Congress on Nanoscience & Nanotechnology (ICNN2012), Kashan, Iran, 8 - 10 Sep. 2012*
  8. Ommolbanin Ebrahimi, **Abolfazl Akbarzadeh**, Nosratollah Zarghami Soodabeh Davaran. Preparation and in vitro evaluation of doxorubicin loaded magnetite nanoparticles modified with PLGA-PEG4000 copolymers. *1st Tabriz International Life Science Conference and 12th Iran Biophysical Chemistry Conference 2013*
  9. FS Tabatabaei Mirakabad, **A Akbarzadeh**, N Zarghami, V Zeighamian. PLGA-based nanoparticles as cancer drug delivery systems. *1st Tabriz International Life Science Conference and 12th Iran Biophysical Chemistry Conference 2013*
- 
-

---

10. Peter Olatunde Ajagbonna, [Abolfazl Akbarzadeh](#), Haleh Mikaeili, Nosratollah Zarghami, Rahmati Mohammad, Amin Barkhordari, Soodabeh Davaran. PLANT BASED DRUG DEVELOPMENT IN NIGERIA: OUR EXPERIENCE WITH SALT AND HYPERTENSION. **PLENARY LECTURES**

11. [Abolfazl Akbarzadeh](#) Nosratollah Zarghami, Soodabeh Davaran. Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible co-polymers. **ICN2014 : 2nd International Conference on Nanotechnology( icn2014.srpioneers.org)**

12. [Abolfazl Akbarzadeh](#) Nosratollah Zarghami, Soodabeh Davaran. Novel polymer-coated magnetic nanoparticles for controlled delivery of doxorubicin. **ICN2014 : 2nd International Conference on Nanotechnology( icn2014.srpioneers.org)**

13. Effat Alizadeh, Nosratollah Zarghami, Mohammad Reza Baghaban Eslaminejad, [Abolfazl Akbarzadeh](#), Shahrbanoo Jahangir, Abolfazl Barzegar, Shahryar Hahemzadeh, Abolghasem Mohammadi. The effect of Dimethyl Sulfoxide on hepatogenic differentiation of Mesenchymal Stem Cells. **The 2nd Annual Congress Stem Cells Research and Application, 22-23 May 2014**

14. Fekri Aval S, Zarghami N, [Akbaerzadeh A](#), Rahmati Yamchi M, Nejati K. Characterization of Magnetic Nanoparticles for Molecular Gene Therapy via Small Interfering RNA in Cancer Cells. **Iran Nano Safety Congress (INSC) February 19-20 2014 Tehran, Iran**

15. Elham Anari, [Akbaerzadeh A](#), Zarghami N, Davaran S, Nejati K. Preparation and in-vitro evaluation of doxorubicin-loaded Fe<sub>3</sub>O<sub>4</sub> magnetic nanoparticles modified with biocompatible copolymers. **13th Congress of Nanotechnology Graduates 8-9 May 2013 Tehran, Iran.**

15. [Akbaerzadeh A](#), Zarghami N, Taefi Nasr Abadi H, Samadi N, Davaran S. Toxicity of Nanoparticles. **Iran Nano Safety Congress (INSC) February 20-21 2013 Tehran, Iran**

16. Gharatape A, Zendejdel H, Asadi M, [Akbaerzadeh A](#), Davaran S. Carbon Nanotubes Toxicological Effects on Respiratory System. **Iran Nano Safety Congress (INSC) February 19-20 2014 Tehran, Iran**

17. Asghari F, Davaran S, [Akbaerzadeh A](#), Samadi N, Zarouni M. Cell Toxicity of Naked and Polymer-Coated Iron Oxide Nanoparticles. **Iran Nano Safety Congress (INSC) February 19-20 2014 Tehran, Iran**

18. Abolfazl Akbarzadeh, Nasrin Nikzamir, Development of doxorubicin-adsorbed magnetic nanoparticles modified with biocompatible copolymers for targeted drug delivery in lung cancer. **presentation and publishing in 19-20 2015 Istanbul, Turkey ICN2015.**

