

**In the name of GOD**

**Curriculum Vitae**



**Name: Ahmad Gholami, Pharm. D., PhD.**

**Date of Birth: September 20, 1981**

**Life Partner: Narjes Khatoon Abootalebi,**

**Physician and Pediatric Intensivist**

**Children: Dina, Sina**

**Current positions:**

Assistant Professor at Shiraz University of Medical Sciences, Shiraz, Iran.

Department of Pharmaceutical Biotechnology, School of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

Dean of Biotechnology Research Center (BRC), Shiraz University of Medical Sciences, Shiraz, Iran.

Member of Department of Medical Nanotechnology, School of Advance Medical Sciences and Technologies, Shiraz University of Medical Sciences, Shiraz, Iran.

Mailing address: Department of Pharmaceutical Biotechnology, School of Pharmacy, Shiraz University of Medical Sciences, P.O. Box 71468-64685, Shiraz, Iran.

Tel: +98-71-32424128 (301), Fax: +98-71-32424126

E-mail: [gholami@sums.ac.ir](mailto:gholami@sums.ac.ir)

Business Address: School of Pharmacy, Karafarin St., Shiraz-Isfahan Highway, Shiraz, Iran

## **Executive positions and experiences:**

2017-Now: Dean of Biotechnology Research Center (BRC), Shiraz University of Medical Sciences, Shiraz, Iran.

2017-now: Head of the Department of Faculty Advisor, Shiraz University of Medical Sciences, Shiraz, Iran.

2016-2018: Cultural Director, School of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

2015- 2022: Deputy Manager of Pharmaceutical Science Research Center, Shiraz University of Medical Sciences, Shiraz, Iran.

2007-2010: Head of Fateme-Al-Zahra hospital, Fars University of Medical Sciences, Mohr, Iran.

2006-2012: Member of Mohr city council, Mohr, Fars, Iran.

2007-2010: Drug Expert at Mohr Health Network, Fars University of Medical Sciences, Mohr, Iran.

2005: Member of the executive committee of the 11th Iranian Pharmacy Students seminar, Shiraz, November 9-11, 2005.

2002 and 2003: Mehregan scientific secretary (Poetry and Fiction Festival of Medical Science students), October 2002-2003, Shiraz, Iran.

2004: Raha Literary arbitrator (holy defense poetry and fiction Festival of Medical Science students), October 2004, Shiraz, Iran.

## **Educations:**

1995-1999: Diploma, Shahed 13 high school, Shiraz, Iran.

1999-2006: Pharm D, Faculty of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

2010- 2014: Ph. D, Department of Pharmaceutical Biotechnology, School of Pharmacy, Shiraz University of Medical Sciences, Shiraz, Iran.

2020-2022: MBA Pharma, Tehran University of Medical Sciences, Tehran, Iran

### **Professional Qualifications and Workshop Attendance:**

- 1- Current issues and solution in nano-medicine efficacies and toxicities (2014)
- 2- Accounting for managers (2014)
- 2- Ethics in Pharmacy (2013)
- 3- Stem Cell Extraction (2012)
- 4- Medical Journalism (2011)
- 5- Western Blotting (2010)
- 6- CPCR (2009)
- 7- Professional Management (2009)

### **Academic Research and Training:**

- Non-viral gene delivery
- Protein delivery
- Magnetic nanoparticle synthesis and characterization
- Magnetofection
- Gene delivery systems
- Enzyme Technology
- Polymerase Chain Reaction (PCR) process
- Real-Time PCR
- Bioprocess and Fermentation
- Recombinant Therapeutic proteins
- Probiotic sciences
- Nano-biotechnology
- Cell Culture
- Cytotoxicity assays
- Antimicrobial assays
- Drug-used in Endodontics

## **Awards and Prizes:**

- 1- Top student of Shiraz University of Medical Science, 2004.
- 2- Vice-champion in National Medical Shahed students Soccer Championship, Mashhad, March 9-15, 2005.
- 3- The best professional Pharmacist of Lamerd County, 2007.
- 4- Third best poster in the field of Pharmaceutical Biotechnology at the 16<sup>th</sup> Iranian Pharmacy Students Seminar, 2011.
- 5- Top poster at the 7<sup>th</sup> Iranian Congress of Clinical Microbiology, 2013.
- 6- The best lecture at Shiraz Pazhohesh Day Seminar, 2013.
- 7- The best Biotechnology Poster among PhD students at the 18<sup>th</sup> Iranian Pharmacy Students Seminar, 2014.
- 8- Top best poster in the field of Pharmaceutical Biotechnology at the 18<sup>th</sup> Iranian Pharmacy Students Seminar, 2014.
- 9- The best poster at Shiraz Pazhohesh Day Seminar, 2014.
- 10- Champion in College Soccer Competition. 2015.
- 11- Third best poster in the field of Pharmaceutical Biotechnology at the 19<sup>th</sup> Iranian Pharmacy Students Seminar, 2015.
- 12- Top poster at the 9<sup>th</sup> Iranian Congress of Clinical Microbiology, 2015.
13. Top Technologist at Shiraz University of Medical Sciences, 2019.
14. Top Academic Educator at Shiraz University of Medical Sciences, 2020.
15. Top Scientist at Shiraz University of Medical Sciences, 2019.

## Publications:

### Articles:

1- Surface engineering of solid supports; Cellulose, Nitrocellulose and Nylon to increase the efficiency of antibody immobilization in diagnostic systems. Mohammad Heiat, Ali Mohammad Latifi, Milad Mohkam, **Ahmad Gholami**, Fatemeh Abolhasani, Mohammad Sadraeian. International Journal of Scientific and Engineering Research. 2014;5(1):1808-1814.

2- \*Time-dependent antibacterial effects of Aloe vera and Zataria multiflora plant essential oils compared to calcium hydroxide in teeth infected with *Enterococcus faecalis*. Abbas Abbaszadegan, Safoora Sahebi, **Ahmad Gholami**, Alireza Delroba, Amin Kiani, Aida Iraj, Paul Vincent Abbott. Journal of Conservative Dentistry. 2014; 5(4):1-10.

3- Chemical constituent and antimicrobial effect of essential oil from *Myrtus communis* leaves on microorganisms involved in persistent endodontic infection compared to two common endodontic irrigants: An in vitro study. Nabavizadeh M, Abbaszadegan A, **Gholami A**, Sheikhi R, Shokouhi M, Shams MS, Ghasemi Y. J Conserv Dent. 2014;17(5):449-53.

4- Isolation and Identification of Highly Xylanase Producing Bacterium *Sphingobacterium* sp. SaH-05 from Soil. Younes Ghasemi, Hajar Sadeghi, **Ahmad Gholami**, Milad Mohkam, Mohammad Kargar. International Journal of Scientific & Engineering Research. International Journal of Scientific and Engineering Research. 2014;5(3):205-209.

5- Producing the recombinant CTB as a delivery/targeting vehicle. Zeinab Karimi, Mohammad Bagher Ghoshoun, Narjes Ebrahimi, **Ahmad Gholami**, Abdollah Ghasemian, Younes Ghasemi. Current Opinion in Biotechnology, 2011; 22.

6- High Level Amylase Production by *Pseudomonas Stutzeri* MI-18; Isolation, Identification and Media Optimization in A Fermentation System Using Response Surface Methodology (RSM). Aboozar Kazemi, Mojtaba Lorpour, **Ahmad Gholami**, Seyed Reza Karimi-Ghavamabadolya, Azam Safari, Kavous Solhjoo , Sara Rasoul-Amini, Younes Ghasemi. Journal of Pure and Applied Microbiology. 2015;9(SI):127-133.

7- Positively charged imidazolium-based ionic liquid-protected silver nanoparticles: A promising disinfectant in root canal treatment. A Abbaszadegan, M Nabavizadeh, **A Gholami**, ZS

Aleyasin, S Dorostkar, M Saliminasab, Y Ghasemi, B Hemmateenejad, H Sharghi. International Endodontic Journal. 2015;48(8):790-800.

8- Production of a novel multi-epitope peptide vaccine for cancer immunotherapy in TC-1 tumor-bearing mice. Navid Nezafat, Mohammad Sadraeian, Mohammad Reza Rahbar, Mohammad Javad Khoshnoud, Milad Mohkam, **Ahmad Gholami**, Mehrzad Banihashemi, Younes Ghasemi; Biologicals. 2015;43(1):11-17.

9- Antimicrobial and cytotoxic activity of *Ferula gummosa* plant essential oil compared to NaOCl and CHX: a preliminary *in vitro* study. Abbas Abbaszadegan, **Ahmad Gholami**, Hosein Mirhadi, Mina Saliminasab, Aboozar Kazemi, Mahmood Reza Moein. Restorative Dentistry and Endodontics; 2015;40(1):50-57.

10- \*The effect of charge at the surface of silver nanoparticles on antimicrobial activity against gram-positive and gram-negative bacteria: a preliminary study. Abbas Abbaszadegan, Yasamin Ghahramani, **Ahmad Gholami**, Bahram Hemmateenejad, Samira Dorostkar, Mohammadreza Nabavizadeh, Hashem Sharghi; Journal of nanomaterials, 2015,8(2015):1-8.

11- Antibacterial and toxic effect of hydrogen peroxide combined with different concentrations of chlorhexidine on periodontal ligament cells in comparison to sodium hypochlorite, Hosein Mirhadi, Abbas Abbaszadegan, Mohammad Ali Ranjbar, Mohammad Reza Azar, Bitam Geramizadeh, Shima Torabi, Zeinab Sadat Aleyasin, **Ahmad Gholami**; Dent Shiraz UnivMed Sci., 2015;16(4):349-355.

12- Lipo-amino acid coated superparamagnetic iron oxide nanoparticles concentration and time dependently enhanced growth of human hepatocarcinoma cell line Hep-G2. **Ahmad Gholami**, Sara Rasoul-amini, Alireza Ebrahiminezhad, Seyed Hassan Seradj, Younes Ghasemi; Journal of nanomaterials, 2015;10(2015):1-9.

13- Isolation and phylogenetic analysis of some lipase producing bacteria from a saline lake. M. Lorpour, A. Kazemi, **A. Gholami**, F. Dabbagh, S. Abbaszadeh, A. Safari, Y. Ghasemi; Journal of Pure and Applied Microbiology, 2015;9(1):497-502.

14- Cloning, Characterization and Bioinformatics Analysis of Novel Cytosine Deaminase from Escherichia coli AGH09. **Gholami, Ahmad**, Samaneh Shahin, Milad Mohkam, Navid Nezafat,

and Younes Ghasemi. International Journal of Peptide Research and Therapeutics, 2015;21(3):365-374.

15- Computational analysis of collagenase from different *Vibrio*, *Clostridium* and *Bacillus* strains to find new enzyme sources. Navid Nezafat, Manica Negahdaripour, **Ahmad Gholami**, Younes Ghasemi. Trends in Pharmaceutical Sciences, 2015;1(4):213-222.

16- Characterization and in vitro Probiotic Assessment of Potential Indigenous *Bacillus* Strains Isolated from Soil Rhizosphere. Milad Mohkam, Sara Rasoul-Amini, Dariush Shokri, Aydin Berenjian, Fateh Rahimi, Mohammad Sadraeian, Bahman Khalvati, **Ahmad Gholami**, Younes Ghasemi. Minerva Biotechnologica, 2016;28(1):19-28.

17- Industrial Production of Polyhydroxyalkanoates by Bacteria: Opportunities and Challenges. **Ahmad Gholami**, Milad Mohkam, Sara Rasoul-Amini, Younes Ghasemi. Minerva Biotechnologica. 2016;28(1):59-74.

18- Antimicrobial and Cytotoxic Activity of *Cuminum Cyminum* as an Intracanal Medicament Compared to Chlorhexidine Gel. Abbaszadegan A, **Gholami A**, Ghahramani Y, Ghareghan R, Ghareghan M, Kazemi A, Iraj A, Ghasemi Y. Iranian Endodontic Journal. 2016;11(1): 44-50.

19- Comparative Study on Characteristics and Cytotoxicity of Bifunctional Magnetic-Silver Nanostructures: Synthesized Using Three Different Reducing Agents. Ebrahimi N, Rasoul-Amini S, Ebrahiminezhad A, Ghasemi Y, **Gholami A**, Seradj H. Acta Metallurgica Sinica (English letters). 2016 Apr 1;29(4):326-34.

20- Antimicrobial and Cytotoxic Activity of *Cinnamomum zeylanicum*, Calcium Hydroxide, and Triple Antibiotic Paste as Root Canal Dressing Materials. Abbas Abbaszadegan , Sahar Dadolahi, **Ahmad Gholami**, Mahmoud Reza Moein, Shahram Hamedani, Younes Ghasemi, Paul Vincent Abbott. The journal of contemporary dental practice. 2016 Feb;17(2):105-113.

21- Antimicrobial Efficacy and Cytocompatibility of Calcium Hypochlorite Solution as a Root Canal Irrigant: An *in Vitro* Investigation. Sedigh shams M, **Gholami A**, Abbaszadegan A, Yazdanparast R, Saberi nejad M, Safari A, Nabavizadeh M, Ghasemi Y. Iranian Endodontic Journal. 2016;11(3): 169-174.

22- Magnetic properties and antimicrobial effect of amino and lipoamino acid coated iron oxide nanoparticles. **Ahmad Gholami**, Sara Rasoul-Amini, Alireza Ebrahiminezhad, Narjeskhatoon Abootalebi, Uranous Niroumand, Narjes Ebrahimi, Younes Ghasemi. Minerva Biotechnologica. 2016 28(4):177-86.

- 23- In silico evaluation of rare codons and their positions in the structure of cytosine deaminase and substrate docking studies. Mojtaba Mortazavi, Navid Nezafat, Manica Negahdaripour, **Ahmad Gholami**, Masoud Torkzadeh-Mahani, Safa Lotfi, Younes Ghasemi. Trends in Pharmaceutical Sciences, 2016; 2(2): 117-130.
- 24- Ghavidel F, Zarshenas M, Sakhteman A, **Gholami A**, Ghasemi Y, Faridi P. The effect of different extraction methods on chemical composition profile and pharmacological activities of essential oils and hydrosols. *Planta Medica*. 2016;81(S 01):P244.
- 25- **Gholami A**, Khabnadideh S, Ghasemi Y, Mirjalili BBF, Shahmoradi R, Zamani L. TiCl<sub>4</sub>/nano-sawdust as an Efficient Biocatalyst for the Synthesis of Highly Substituted Dihydro-2-oxopyrroles as Antimicrobial Agents. *British Journal of Pharmaceutical Research*. 2017;16(2):1-14.
- 26- Emadi F, Amini A, **Gholami A**, Ghasemi Y. Functionalized Graphene Oxide with Chitosan for Protein Nanocarriers to Protect against Enzymatic Cleavage and Retain Collagenase Activity. *Scientific Reports*. 2017;7:42258.
- 27- **Gholami A**, Ghoshoon M-B, Ghafari P, Ghasemi Y. The effect of different positively charged silver nanoparticles against bacteria, fungi and mammalian cell line. Trends in Pharmaceutical Sciences. 2017;3(2):135-42.
- 28- **Gholami A**, Roshanfard F, Ghasemi Y. A comprehensive review of gene therapy, recent progress and future prospects. *Razi Journal of Medical Sciences*. 2016;23(149):28-45.
- 29- Montazeri-Najafabady N, Ghasemi Y, Dabbaghmanesh MH, Talezadeh P, Koohpeyma F, **Gholami A**. Supportive Role of Probiotic Strains in Protecting Rats from Ovariectomy-Induced Cortical Bone Loss. *Probiotics and Antimicrobial Proteins*. 2019;11(4):1145-54.
- 30- **Gholami A**. Suicide gene therapy: A special focus on progress and concerns about cancer treatment. Trends in Pharmaceutical Sciences. 2017;3(4):221-36.
- 31- **Gholami A**, Abootalebi N, Nazem M, Shirikosh EH, Ghasemi Y. A new cost-effective method to evaluate collagenase activity using nano-graphene oxide. Trends in Pharmaceutical Sciences. 2017;3(4):287-92.



- 32- Ghavidel F, Zarshenas MM, Ghasemi Y, Gholami A, Sakhteman A, Faridi P. Impact of two different extraction methods on chemical composition and antimicrobial activities of multi-ingredients essential oils and hydrosols. *Trends in Pharmaceutical Sciences*. 2018;4(3).
- 33- Abbaszadegan A, **Gholami A**, Abbaszadegan S, Aleyasin ZS, Ghahramani Y, Dorostkar S, Hemmateenejad B, Ghasemi Y, Sharghi H. The Effects of Different Ionic Liquid Coatings and the Length of Alkyl Chain on Antimicrobial and Cytotoxic Properties of Silver Nanoparticles. *Iranian endodontic journal*. 2017;12(4):481.
- 34- Nabavizadeh M, Abbaszadegan A, **Gholami A**, Kadkhoda Z, Mirhadi H, Ghasemi Y, Safari A, Hemmateenejad B, Dorostkar S, Sharghi H. Antibiofilm Efficacy of Positively Charged Imidazolium-Based Silver Nanoparticles in *Enterococcus faecalis* Using Quantitative Real-Time PCR. *Jundishapur Journal of Microbiology*. 2017;10(10).
- 35- Raei MJ, Ebrahiminezhad A, **Gholami A**, Ghoshoon MB, Ghasemi Y. Magnetic immobilization of recombinant *E. coli* producing extracellular asparaginase: An effective way to intensify downstream process. *Separation Science and Technology*. 2018;53(9):1397-404.
- 36- Khoshneviszadeh M, Zargarnezhad S, Ghasemi Y, **Gholami A**. Evaluation of Surface-modified Superparamagnetic Iron Oxide Nanoparticles to Optimize Bacterial Immobilization for Bio-separation with the Least Inhibitory Effect on Microorganism Activity. *Nanoscience & Nanotechnology-Asia*. 2020;10(2):166-74.
- 37- **Gholami A**, Ebrahiminezhad A, Abootalebi N, Ghasemi Y. Synergistic evaluation of functionalized magnetic nanoparticles and antibiotics against *Staphylococcus aureus* and *Escherichia coli*. *Pharmaceutical nanotechnology*. 2018;6(4):276-286.
- 38- Emadi F, Amini A, Ghasemi Y, **Gholami A**. Graphene: recent advances in engineering, medical and biological sciences, and future prospective. *Trends in Pharmaceutical Sciences*. 2018 Oct 21;4(3).
- 38- Dorosti, Hesam, Mahboobeh Eslami, Manica Negahdaripour, Mohammad Bagher Ghoshoon, **Ahmad Gholami**, Reza Heidari, Ali Dehshahri, Nasrollah Erfani, Navid Nezafat, and Younes Ghasemi. Vaccinomics approach for developing multi-epitope peptide pneumococcal vaccine. *Journal of Biomolecular Structure and Dynamics* (2019): 1-12.
39. Abbaszadegan, Abbas, Yasamin Ghahramani, Melika Farshad, Mehdi Sedigh-Shams, **Ahmad Gholami**, and Akram Jamshidzadeh. "In Vitro Evaluation of Dynamic Viscosity, Surface Tension and Dentin Wettability of Silver Nanoparticles as an Irrigation Solution." *Iranian Endodontic Journal* 14, no. 1 (2019): 23-27.
40. Kalateh Sadati A, **Gholami A**. Iran's Biotechnology Needs to Cross of Bioethics Debates *Lags*. 3. 2019; 2 (1) :61-63.

- 41- Nasim Hajighahramani, Mahboobeh Eslami, Manica Negahdaripour, Mohammad Bagher Ghoshoon<sup>a</sup>, Ali Dehshahri, Nasrollah Erfani, Reza Heidari, **Ahmad Gholami**, Navid Nezafat, Younes Ghasemi. Computational design of a chimeric epitope-based vaccine to protect against *Staphylococcus aureus* infections. *Molecular and Cellular Probes* 2019; 46: 101414.
42. **Ahmad Gholami**, Shiva Ghasemi Firoozabadi, Younes Ghasemi, Milad Mohkam. Mahvieh, an Amazing Nutraceutical Bridge between Traditional and Modern Diet. *Trends in Pharmaceutical Sciences*. 2019; 5(2): 73-80.
43. **Gholami A**, Mohammadi F, Ghasemi Y, Omidifar N, Ebrahiminezhad A. Antibacterial activity of SPIONs versus ferrous and ferric ions under aerobic and anaerobic conditions: a preliminary mechanism study. *IET Nanobiotechnol*. 2020 Apr;14(2):155-160.
44. **Gholami A**, Mousavi SM, Hashemi SA, Ghasemi Y, Chiang W-H, Parvin N. Current trends in chemical modifications of magnetic nanoparticles for targeted drug delivery in cancer chemotherapy. *Drug Metabolism Reviews*. 2020;52(1):205-24.
45. Seyyed Mojtaba Mousavi, Maryam Zarei, Seyyed Alireza Hashemi, Seeram Ramakrishna, Wei-Hung Chiang, Chin Wei Lai & **Ahmad Gholami** (2020) Gold nanostars-diagnosis, bioimaging and biomedical applications. *Drug Metabolism Reviews*. 2020;52(2): 299-318.
46. Omidifar N, Nili-Ahmadabadi A, Gholami A, Dastan D, Ahmadimoghaddam D, Nili-Ahmadabadi H. Biochemical and Histological Evidence on the Protective Effects of *Allium hirtifolium* Boiss (Persian Shallot) as an Herbal Supplement in Cadmium-Induced Hepatotoxicity. *Evidence Based Complementary Alternative Medicine*. 2020 Jun 17;2020:7457504.
47. Gholami A, Emadi F, Nazem M, Aghayi R, Khalvati B, Amini A, et al. Expression of key apoptotic genes in hepatocellular carcinoma cell line treated with etoposide-loaded graphene oxide. *Journal of Drug Delivery Science and Technology*. 2020;57:101725.
48. Mousavi SM, Zarei M, Hashemi SA, Ramakrishna S, Chiang W-H, Lai CW, et al. Asymmetric Membranes: A Potential Scaffold for Wound Healing Applications. *Symmetry*. 2020;12(7):1100.
49. Emadi F, Emadi A, Gholami A. A Comprehensive Insight Towards Pharmaceutical Aspects of Graphene Nanosheets. *Curr Pharm Biotechnol*. 2020;21(11):1016-1027.
50. Heiran R, Sepehri S, Jarrahpour A, Digorgio C, Douafer H, Brunel JM, Gholami A, Riazimontazer E, Turos E. Synthesis, docking and evaluation of in vitro anti-inflammatory activity of novel morpholine capped  $\beta$ -lactam derivatives. *Bioorg Chem*. 2020 Sep;102:104091.
51. Mousavi SM, Hashemi SA, Zarei M, Gholami A, Lai CW, Chiang WH, Omidifar N, Bahrani S, Mazraedoost S. Recent Progress in Chemical Composition, Production, and Pharmaceutical

Effects of Kombucha Beverage: A Complementary and Alternative Medicine. Evid Based Complement Alternat Med. 2020 Nov 18;2020:4397543.

52. Mousavi SM, Hashemi SA, Parvin N, Gholami A, Ramakrishna S, Omidifar N, Moghadami M, Chiang WH, Mazraedoost S. Recent biotechnological approaches for treatment of novel COVID-19: from bench to clinical trial. Drug Metab Rev. 2021 Feb;53(1):141-170.

53. Gholami A, Hashemi SA, Yousefi K, Mousavi SM, Chiang W-H, Ramakrishna S, et al. 3D Nanostructures for Tissue Engineering, Cancer Therapy, and Gene Delivery. Journal of Nanomaterials. 2020;2020:1852946.

54. Abootalebi SN, Saeed A, Gholami A, Mohkam M, Kazemi A, Nezafat N, et al. Screening, characterization and production of thermostable alpha-amylase produced by a novel thermophilic bacillus megaterium isolated from pediatric intensive care unit. Journal of Environmental Treatment Techniques. 2020;8(3):952-60.

55. Borzouyan Dastjerdi M, Amini A, Nazari M, Cheng C, Benson V, Gholami A, Ghasemi Y. Novel versatile 3D bio-scaffold made of natural biocompatible hagfish exudate for tissue growth and organoid modeling. Int J Biol Macromol. 2020 May 6;158:894-902.

56. Asgari, M.S., Sepehri, S., Bahadorikhalili, S. et al. Magnetic silica nanoparticle-supported copper complex as an efficient catalyst for the synthesis of novel triazolopyrazinylacetamides with improved antibacterial activity. Chemistry Heterocycle Compounds. 2020: 56, 488–494.

57. Azarang A, Farshad O, Ommati MM, Jamshidzadeh A, Heidari R, Abootalebi SN, et al. Protective Role of Probiotic Supplements in Hepatic Steatosis: A Rat Model Study. BioMed Research International. 2020;2020:5487659.

58. Zargarnezhad S, Gholami A, Khoshneviszadeh M, Abootalebi SN, Ghasemi Y. Antimicrobial Activity of Isoniazid in Conjugation with Surface-Modified Magnetic Nanoparticles against *Mycobacterium tuberculosis* and Nonmycobacterial Microorganisms. Journal of Nanomaterials. 2020;2020:7372531.

59. Khoshneviszadeh M, Zargarnezhad S, Ghasemi Y, Gholami A. Evaluation of surface-modified superparamagnetic iron oxide nanoparticles to optimize bacterial immobilization for bio-separation with the least inhibitory effect on microorganism activity. Nanoscience and Nanotechnology - Asia. 2020;10(2):166-74.

60. Gholami, A., Dabbaghmanesh, M.H., Ghasemi, Y. et al. Probiotics ameliorate pioglitazone-associated bone loss in diabetic rats. Diabetology and Metabolic Syndrome. 2020: 12 (1), 78.

61. Ghahramani Y, Mohammadi N, Gholami A, Ghaffaripour D. Antimicrobial Efficacy of Intracanal Medicaments against *E. Faecalis* Bacteria in Infected Primary Molars by Using Real-

Time PCR: A Randomized Clinical Trial. *International Journal of Dentistry*. 2020;2020:6669607.

62. Mohammadi F, Abbaszadegan A, Gholami A. Recent advances in nanodentistry: a special focus on endodontics. *Micro & Nano Letters*. 2020;15(12):812--6.

63. Ashoori Y, Mohkam M, Heidari R, Abootalebi SN, Mousavi SM, Hashemi SA, Golkar N, Gholami A. Development and In Vivo Characterization of Probiotic Lysate-Treated Chitosan Nanogel as a Novel Biocompatible Formulation for Wound Healing. *Biomed Res Int*. 2020 Dec 28;2020:8868618.

64. Gholami A, Emadi F, Amini A, Shokripour M, Chashmpoosh M, Omidifar N. Functionalization of Graphene Oxide Nanosheets Can Reduce Their Cytotoxicity to Dental Pulp Stem Cells. *Journal of Nanomaterials*. 2020;2020:6942707.

65. Gholami A, Ghasemi Y, Kazemi A, Abootalebi SN, Irajie C, Ireji A, et al. Bacterial strain isolated from high-salt environments can produce large amounts of new polyhydroxyalkanoate (Pha). *Journal of Environmental Treatment Techniques*. 2020;8(4):1268-73.

66. Mirjalili BBF, Khabnadideh S, Gholami A, Zamani L, Nezamalhoseini SM, Kalantari N. Cu(OAc)<sub>2</sub> as a green promoter for one-pot synthesis of 2-amino-4,6-diarylpyridine-3-carbonitrile as antibacterial agents. *Bulletin of the Chemical Society of Ethiopia*. 2020;34(1):149-56.

67. Moazami F, Gholami A, Mehrabi V, Ghahramani Y. Evaluation of the Antibacterial and Antifungal Effects of ProRoot MTA and Nano-fast Cement: An In Vitro Study. *J Contemp Dent Pract*. 2020 Jul 1;21(7):760-764.

68. Leila Zamani, Soghra Khabnadideh, Kamiar Zomorodian, Amirhossein Sakhteman, **Ahmad Gholami**, Zahra Rezaei, Alireza Mehdipoor, Mohsen Esmaili Dehkordi, Reyhaneh Mortazavi & Sajad Ghafari. Docking, Synthesis, Antifungal and Cytotoxic Activities of Some Novel Substituted 4H-Benzoxazin-3-one, Polycyclic Aromatic Compounds. 2021; 41(2), 347-367.

69. Asadi K, **Gholami A\***. Virosome-based nanovaccines; a promising bioinspiration and biomimetic approach for preventing viral diseases: A review. *Int J Biol Macromol*. 2021 Apr 15;182:648-658.

70. Hashemi SA, Golab Behbahan NG, Bahrani S, Mousavi SM, Gholami A, Ramakrishna S, et al. Ultra-sensitive viral glycoprotein detection NanoSystem toward accurate tracing SARS-CoV-2 in biological/non-biological media. *Biosensors and Bioelectronics*. 2021;171:112731.

71. Mousavi SM, Hashemi SA, **Gholami A\***, Mazraedoost S, Chiang W-H, Arjmand O, et al. Precise Blood Glucose Sensing by Nitrogen-Doped Graphene Quantum Dots for Tight Control of Diabetes. *Journal of Sensors*. 2021;2021:5580203.

72. Mousavi SM, Hashemi SA, Parvin N, **Gholami A\***, Ramakrishna S, Omidifar N, et al. Recent biotechnological approaches for treatment of novel COVID-19: from bench to clinical trial. *Drug Metabolism Reviews*. 2021;53(1):141-70.
73. Asadi K, **Gholami A\***. Virosome-based nanovaccines; a promising bioinspiration and biomimetic approach for preventing viral diseases: A review. *International Journal of Biological Macromolecules*. 2021;182:648-58.
74. Mousavi SM, Hashemi SA, Bahrani S, Yousefi K, Behbudi G, Babapoor A, Omidifar N, Lai CW, **Gholami A**, Chiang WH. Recent advancements in polythiophene-based materials and their biomedical, geno sensor and DNA detection. *International Journal of Molecular Sciences*. 2021;22(13):6850.
75. Mousavi S-M, Nejad ZM, Hashemi SA, Salari M, **Gholami A**, Ramakrishna S, et al. Bioactive agent-loaded electrospun nanofiber membranes for accelerating healing process: A review. *Membranes*. 2021;11(9):702.
76. Mousavi SM, Hashemi SA, Mazraedoost S, Yousefi K, **Gholami A\***, Behbudi G, et al. Multifunctional gold nanorod for therapeutic applications and pharmaceutical delivery considering cellular metabolic responses, oxidative stress and cellular longevity. *Nanomaterials*. 2021;11(7):1868.
77. Rezaei A, Aligholi H, Zeraatpisheh Z, **Gholami A**, Mirzaei E. Collagen/chitosan-functionalized graphene oxide hydrogel provide a 3D matrix for neural stem/precursor cells survival, adhesion, infiltration and migration. *Journal of Bioactive and Compatible Polymers*. 2021;36(4):296-313.
78. Omidifar N, moghadami M, Mousavi SM, Hashemi SA, **Gholami A\***, Shokripour M, et al. Trends in Natural Nutrients for Oxidative Stress and Cell Senescence. *Oxidative Medicine and Cellular Longevity*. 2021;2021:7501424.
79. Yousefi K, Manesh HD, Khalifeh AR, **Gholami A**. Fabrication and Characterization of a Nanofast Cement for Dental Restorations. *BioMed Research International*. 2021;2021:7343147.
80. Mousavi SM, Hashemi SA, **Gholami A\***, Omidifar N, Zarei M, Bahrani S, et al. Bioinorganic Synthesis of Polyrhodanine Stabilized Fe<sub>3</sub>O<sub>4</sub>/Graphene Oxide in Microbial Supernatant Media for Anticancer and Antibacterial Applications. *Bioinorganic Chemistry and Applications*. 2021;2021:9972664.
81. Montazeri-Najafabady N, Ghasemi Y, Dabbaghmanesh MH, Ashoori Y, Talezadeh P, Koohpeyma F, Montazeri-Najafabady N, Ghasemi Y, Dabbaghmanesh MH, Ashoori Y, Talezadeh P, Koohpeyma F, Abootalebi SN, **Gholami A\***. Exploring the bone sparing effects of postbiotics in the post-menopausal rat model. *BMC Complementary Medicine and Therapies*. 2021;21(1):1-12.

82. Omidifar N, Nili-Ahmadabadi A, Nakhostin-Ansari A, Lankarani KB, Moghadami M, Mousavi SM, Omidifar, N., Nili-Ahmadabadi, A., Nakhostin-Ansari, A., Lankarani, K.B., Moghadami, M., Mousavi, S.M., Hashemi, S.A., **Gholami, A.**, Shokripour, M. and Ebrahimi, Z. The modulatory potential of herbal antioxidants against oxidative stress and heavy metal pollution: plants against environmental oxidative stress. *Environmental Science and Pollution Research*. 2021;28(44):61908-18.
83. Dorosti H, Nezafat N, Heidari R, Ghoshoon MB, **Gholami A**, Dehshahri A, Erfani N, Rahbar MR, Ghasemi Y. Production and immunological evaluation of epitope-based preventative pneumococcal candidate vaccine comprising immunodominant epitopes from PspA, CbpA, PhtD and PiuA antigens. *Current Pharmaceutical Biotechnology*. 2021;22,(14): 1900-1909.
84. Mousavi SM, Yousefi K, Hashemi SA, Afssa M, BahranI S, **Gholami A\***, et al. Renewable Carbon Nanomaterials: Novel Resources for Dental Tissue Engineering. *Nanomaterials*. 2021;11(11):2800.
85. Heiran R, Jarrahpour A, Riazimontazer E, **Gholami A\***, Troudi A, Digiorgio C, et al. Novel sulfonamide- $\beta$ -lactam hybrids incorporating the piperazine moiety as potential iNOS inhibitors with promising antibacterial activity. *ChemistrySelect*. 2021;6(21):5313-9.
86. Amini A, Fallah A, Sedaghat A, **Gholami A**, Cheng C, Gupta AR. Natural vs. Synthetic Phosphate as Efficient Heterogeneous Compounds for Synthesis of Quinoxalines. *International journal of molecular sciences*. 2021;22(24):13665.
87. Goudarzian N, Esmaeli M, Mousavi S, Hashemi S, Zarei M, **Gholami A**, et al. Preparation physical, mechanical properties and biodegradable study of SAN/EOC/nanoclay/proteins nanocomposite. *Polymers from Renewable Resources*. 2021;12(1-2):19-34.
88. Mousavi SM, Hashemi SA, Behbudi G, Mazraedoost S, Omidifar N, Gholami A, et al. A Review on Health Benefits of *Malva sylvestris* L. Nutritional Compounds for Metabolites, Antioxidants, and Anti-Inflammatory, Anticancer, and Antimicrobial Applications. *Evidence-Based Complementary and Alternative Medicine*. 2021;2021:5548404.
89. Mousavi SM, Behbudi G, Hashemi SA, Babapoor A, Chiang W-H, Ramakrishna S, Rahman MM, Lai CW, **Gholami A**, Omidifar N, Yousefi K. Recent Progress in Electrochemical Detection of Human Papillomavirus (HPV) via Graphene-Based Nanosensors. *Journal of Sensors*. 2021;2021:6673483.
90. **Gholami A**, Shams MS, Abbaszadegan A, Nabavizadeh M. Ionic liquids as capping agents of silver nanoparticles. Part II: Antimicrobial and cytotoxic study. *Green Processing and Synthesis*. 2021;10(1):585-93.
- 91.

91. Mousavi SM, Hashemi SA, Iman Moezzi SM, Ravan N, **Gholami A\***, Lai CW, et al. Recent Advances in Enzymes for the Bioremediation of Pollutants. *Biochemistry Research International*. 2021;2021:5599204.
92. **Gholami A**, Azizpoor J, Aflaki E, Rezaee M, Keshavarz K. Cost-Effectiveness Analysis of Biopharmaceuticals for Treating Rheumatoid Arthritis: Infliximab, Adalimumab, and Etanercept. *BioMed Research International*. 2021;2021:4450162.
93. Abootalebi SN, Mousavi SM, Hashemi SA, Shorafa E, Omidifar N, **Gholami A\***. Antibacterial Effects of Green-Synthesized Silver Nanoparticles Using *Ferula asafoetida* against *Acinetobacter baumannii* Isolated from the Hospital Environment and Assessment of Their Cytotoxicity on the Human Cell Lines. *Journal of Nanomaterials*. 2021;2021:6676555.
94. Omidifar N, Bagheri Lankarani K, Moghadami M, Shokripour M, Chashmpoosh M, Mousavi SM, Hashemi SA, **Gholami A\***. Different Laboratory Diagnosis methods of COVID-19: A Systematic Review. *Archives of Clinical Infectious Diseases*. 2021;16(1):1-6.
95. **Gholami A\***, Farjami F, Ghasemi Y. The Development of an Amperometric Enzyme Biosensor Based on a Polyaniline-Multiwalled Carbon Nanocomposite for the Detection of a Chemotherapeutic Agent in Serum Samples from Patients. *Journal of Sensors*. 2021;2021:5515728.
96. Mousavi SM, Hashemi SA, Kalashgrani MY, Rahmanian V, **Gholami A**, Chiang WH, Lai CW. Biomedical Applications of an Ultra-Sensitive Surface Plasmon Resonance Biosensor Based on Smart MXene Quantum Dots (SMQDs). *Biosensors*. 2022 Sep 9;12(9):743.
97. Mohkam M, Firoozabadi SG, Ghasemi Y, **Gholami A\***. The probiotic and nutritional content of Souro, an Iranian traditional food. *Journal of microbiology, biotechnology, and food sciences*. 2022 Feb 1;11(4):e2627.
98. **Gholami A**, Dabbaghmanesh MH, Ghasemi Y, Koohepyma F, Talezadeh P, Montazeri-Najafabady N. The ameliorative role of specific probiotic combinations on bone loss in the ovariectomized rat model. *BMC Complementary Medicine and Therapies*. 2022 Dec;22(1):1-1.
99. **Gholami A**, Mousavi SM, Shomali A, Hashemi SA, Abootalebi SN, Chiang WH, Barzegar A, Shokripour M, Zadeh AM. One-Put Ferula-Mediated Synthesis of Biogenic Silver Nanoparticles with More Antimicrobial Effect and Promising Human Cell Biocompatibility. *Journal of Nanomaterials*. 2022 Sep 15.
100. Mousavi SM, Hashemi SA, Ghahramani Y, Azhdari R, Yousefi K, **Gholami A\***, Fallahi Nezhad F, Vijayakameswara Rao N, Omidifar N, Chiang WH. Antiproliferative and Apoptotic Effects of Graphene Oxide@ AlFu MOF Based Saponin Natural Product on OSCC Line. *Pharmaceuticals*. 2022 Sep 12;15(9):1137.

101. Riazimontazer E, Heiran R, Jarrahpour A, **Gholami A\***, Hashemi Z, Kazemi A. Molecular Docking and Antibacterial Assessment of Monocyclic  $\beta$ - Lactams against Broad- Spectrum and Nosocomial Multidrug- Resistant Pathogens. *ChemistrySelect*. 2022 Oct 20;7(39):e202203373.
102. Mousavi SM, Hashemi SA, Bahrani S, Sadrmousavi-Dizaj A, Arjmand O, Omidifar N, Lai CW, Chiang WH, **Gholami A\***. Bioinorganic Synthesis of Sodium Polytungstate/Polyoxometalate in Microbial Kombucha Media for Precise Detection of Doxorubicin. *Bioinorganic Chemistry and Applications*. 2022 Aug 8;2022.
103. Montazeri-Najafabady N, Kazemi K, **Gholami A\***. Recent advances in antiviral effects of probiotics: potential mechanism study in prevention and treatment of SARS-CoV-2. *Biologia*. 2022 Jun 28:1-8.
104. **Gholami A**, Ghezelbash K, Asheghi B, Abbaszadegan A, Amini A. An in vitro study on the antibacterial effects of chlorhexidine-loaded positively charged silver nanoparticles on *Enterococcus faecalis*. *Journal of Nanomaterials*. 2022 Jul 25;2022.
105. Amini A, Firouzkouhi N, **Gholami A**, Gupta AR, Cheng C, Davvaz B. Soft hypergraph for modeling global interactions via social media networks. *Expert Systems with Applications*. 2022 Oct 1;203:117466.
106. Khosravi Ardakani H, Gerami M, Chashmpoosh M, Omidifar N, **Gholami A\***. Recent Progress in Nanobiosensors for Precise Detection of Blood Glucose Level. *Biochemistry Research International*. 2022 Jan 17;2022.
107. Mousavi SM, Hashemi SA, Yari Kalashgrani M, Omidifar N, Lai CW, Vijayakameswara Rao N, **Gholami A\***, Chiang WH. The Pivotal Role of Quantum Dots-Based Biomarkers Integrated with Ultra-Sensitive Probes for Multiplex Detection of Human Viral Infections. *Pharmaceuticals*. 2022 Jul 17;15(7):880.
108. Mohammadi F, **Gholami A\***, Omidifar N, Amini A, Kianpour S, Taghizadeh SM. The potential of surface nano-engineering in characteristics of cobalt-based nanoparticles and biointerface interaction with prokaryotic and human cells. *Colloids and Surfaces B: Biointerfaces*. 2022 Jul 1;215:112485.
109. Mousavi SM, Hashemi SA, Yari Kalashgrani M, Kurniawan D, **Gholami A**, Rahmanian V, Omidifar N, Chiang WH. Recent Advances in Inflammatory Diagnosis with Graphene Quantum Dots Enhanced SERS Detection. *Biosensors*. 2022 Jun 27;12(7):461.
110. Mousavi SM, Hashemi SA, Rahmanian V, Kalashgrani MY, **Gholami A\***, Omidifar N, Chiang WH. Highly sensitive flexible SERS-based sensing platform for detection of COVID-19. *Biosensors*. 2022 Jun 28;12(7):466.



111. Mousavi SM, Behbudi G, **Gholami A\***, Hashemi SA, Nejad ZM, Bahrani S, Chiang WH, Wei LC, Omidifar N. Shape-controlled synthesis of zinc nanostructures mediating macromolecules for biomedical applications. *Biomaterials Research*. 2022 Dec;26(1):1-20.
112. Negahdaripour M, Rahbar MR, Mosalanejad Z, **Gholami A\***. Theta-Defensins to Counter COVID-19 as Furin Inhibitors: In Silico Efficiency Prediction and Novel Compound Design. *Computational and mathematical methods in medicine*. 2022 Feb 9;2022.
113. Ommati, M.M., Li, H., Jamshidzadeh, A., Khoshghadam, F., Retana-Márquez, S., Lu, Y., Farshad, O., Nategh Ahmadi, M.H., **Gholami, A.** and Heidari, R., 2022. The crucial role of oxidative stress in non-alcoholic fatty liver disease-induced male reproductive toxicity: The ameliorative effects of Iranian indigenous probiotics. *Naunyn-Schmiedeberg's Archives of Pharmacology*, 395(2), pp.247-265.
114. Mousavi SM, Hashemi SA, **Gholami A**, Kalashgrani MY, Vijayakameswara Rao N, Omidifar N, Hsiao WW, Lai CW, Chiang WH. Plasma-Enabled Smart Nanoexosome Platform as Emerging Immunopathogenesis for Clinical Viral Infection. *Pharmaceutics*. 2022 May;14(5):1054.
115. Mousavi SM, Hashemi SA, Kalashgrani MY, **Gholami A**, Omidifar N, Babapoor A, Vijayakameswara Rao N, Chiang WH. Recent Advances in Plasma-Engineered Polymers for Biomarker-Based Viral Detection and Highly Multiplexed Analysis. *Biosensors*. 2022 Apr 28;12(5):286.
116. Hashemi, S.A., Mousavi, S.M., Bahrani, S., **Gholami, A\***, Chiang, W.H., Yousefi, K., Omidifar, N., Rao, N.V., Ramakrishna, S., Babapoor, A. and Lai, C.W., 2022. Bio-enhanced polyrhodanine/graphene Oxide/Fe<sub>3</sub>O<sub>4</sub> nanocomposite with kombucha solvent supernatant as ultra-sensitive biosensor for detection of doxorubicin hydrochloride in biological fluids. *Materials Chemistry and Physics*, 279, p.125743.
117. Mousavi SM, Hashemi SA, Kalashgrani MY, Omidifar N, Bahrani S, Vijayakameswara Rao N, Babapoor A, **Gholami A**, Chiang WH. Bioactive Graphene Quantum Dots Based Polymer Composite for Biomedical Applications. *Polymers*. 2022 Feb 5;14(3):617.

### **Book:**

Gholami A, Nikseresht F (2004); **Souvenir of Mehregan (in Persian)**, Navid Shiraz publisher, 1<sup>st</sup> Edition, Shiraz, Iran.

Gholami A, Ashoori Y (2018). **Probiotic for dummies** (translation), Avand danesh, Tehran, Iran.

Tabei SZ, Gholami A (2021). **In search of lost health (in Persian)**, Navid Shiraz publisher, 1<sup>St</sup> Edition, Shiraz, Iran.

### **Genes and nucleotide sequences:**

15 genes and nucleotide sequences published at Pubmed (NCBI)

#### **GenBank flat file:**

1. LOCUS: KF437334, 1023 bp DNA linear, BCT 25-AUG-2013, DEFINITION: Bacillus sp. AGH01 16S ribosomal RNA gene, partial sequence, ACCESSION: KF437334, AUTHORS: Ghasemi,Y., **Gholami,A.**, Shahin Akbarabadi,S. and Kazemi,A, TITLE: PCR amplification and characterization of 16S rRNA gene Bacillus sp. AGH01

2. LOCUS: KF437335, 813 bp DNA, linear, BCT 25-AUG-2013, DEFINITION: Pseudomonas sp. AGH02 16S ribosomal RNA gene, partial sequence, ACCESSION: KF437335, AUTHORS: Ghasemi,Y., **Gholami,A.**, Shahin Akbarabadi,S. and Kazemi,A. TITLE : PCR amplification and characterization of 16S rRNA gene Pseudomonas sp. AGH02

3. LOCUS: KF465680, 567 bp, DNA, linear BCT 31-OCT-2013, DEFINITION: Bacillus sp. AGH03 16S ribosomal RNA gene, partial sequence, ACCESSION: KF465680, AUTHORS: Ghasemi,Y., **Gholami,A.**, Mohkam,M. and Kazemi,A.

4. LOCUS: KF465681, 747 bp, DNA, linear, BCT 31-OCT-2013, DEFINITION: Enterococcus sp. AGH04 16S ribosomal RNA gene, partial sequence. AUTHORS: Ghasemi,Y., Abbaszadegan,A., **Gholami,A.**, Kiani,A., Delroba,A. and Kazemi,A.

5. LOCUS: KF668505, 830 bp, DNA, linear, BCT 31-OCT-2013, DEFINITION : Staphylococcus sp. BCCS A23 16S ribosomal RNA gene, partial sequence., ACCESSION: KF668505, AUTHORS: Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., **Golami,A.**, Lorpour,M. and

Abbaszadeh,S.

6. LOCUS: KF668506, 830 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: Staphylococcus sp. BCCS A24 16S ribosomal RNA gene, partial sequence, ACCESSION: KF668506 AUTHORS Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., **Golami,A.**, Lorpour,M. and Abbaszadeh,S.

7. LOCUS: KF668507, 835 bp DNA, linear, BCT 31-OCT-2013, DEFINITION, Staphylococcus sp. BCCS A25 16S ribosomal RNA gene, partial sequence., ACCESSION: KF668507, AUTHORS: Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., **Golami,A.**, Lorpour,M. and Abbaszadeh,S.

8. LOCUS: KF668508, 830 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: Staphylococcus sp. BCCS A26 16S ribosomal RNA gene, partial sequence, ACCESSION: KF668508, AUTHORS: Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., **Golami,A.**, Lorpour,M. and Abbaszadeh,S.

9. LOCUS: KF668509, 831 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: Staphylococcus sp. BCCS A27 16S ribosomal RNA gene, partial sequence. ACCESSION: KF668509, AUTHORS: Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., **Golami,A.**, Lorpour,M. and Abbaszadeh,S.

10. LOCUS: KF668510, 841 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: Staphylococcus sp. BCCS A28 16S ribosomal RNA gene, partial sequence., ACCESSION: KF668510, AUTHORS: Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., Golami,A., Lorpour,M. and Abbaszadeh,S.

11. LOCUS: KF668511, 828 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: Staphylococcus sp. BCCS A29 16S ribosomal RNA gene, partial sequence, ACCESSION: KF668511, AUTHORS: Ghasemi,Y., Rasoul-Amini,S., Kazemi,A., **Golami,A.**, Lorpour,M. and

Abbaszadeh,S.

12. LOCUS: KF701466, 743 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: *Bacillus cereus* strain AGH08 16S ribosomal RNA gene, partial sequence, ACCESSION: KF701466, AUTHORS: **Gholami,A.**, Ghasemi,Y., Shahin,S., Kazemi,A. and Rasoul-Amini,S.

13. LOCUS: KF701467, 837 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: *Escherichia* sp. AGH09 16S ribosomal RNA gene, partial sequence, ACCESSION: KF701467, AUTHORS: **Gholami,A.**, Shahin,S., Abootalebi,N.-K., Rasoul-Amini,S. and Ghasemi,Y.

14. LOCUS: KF701468, 837 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: *Escherichia* sp. AGH10 16S ribosomal RNA gene, partial sequence, ACCESSION: KF701468, AUTHORS: Ghasemi,Y., **Gholami,A.**, Shahin Akbarabadi,S. and Kazemi,A.

15. LOCUS: KF701469, 439 bp DNA, linear, PLN 31-OCT-2013, DEFINITION: *Chlorella* sp. YG 11 16S ribosomal RNA gene, partial sequence, ACCESSION: KF701469 1 to 439), AUTHORS **Gholami,A.**, Bagheri,M., Rasoul-Amini,S., Ebrahiminezhad,A. and Ghoshoon,M.B.

16. LOCUS: KF701470, 862 bp DNA, linear, BCT 31-OCT-2013, DEFINITION: *Enterococcus faecalis* strain AGH011 16S ribosomal RNA gene, partial sequence. ACCESSION: KF701470, AUTHORS: Ghasemi,Y., **Gholami,A.**, Abbaszadegan,A., Kiani,A., Delroba,A. and Sahebi,S.

## **Abstracts and Congress presentations:**

1- Gholami, A., Mehdipoor, AR., Rezaei, Z.; **Evaluation of antibiotic administration in Shiraz physician prescriptions.** The 10<sup>th</sup> Seminar of Iranian Pharmacy Students, May 28-30, 2003, Tabriz, Iran, 113.

2-Gholami A., Ghsaemi, Y.; **Screening, characterization and identification of high thermostable amylase producing bacterial strains isolated from different soil sources.** The 16<sup>th</sup> Iranian Pharmacy Students seminar, October 15-17, 2011, Tehran, Iran, 92.

2-Shahin Akbarabadi S, Gholami A, Ghsaemi, Y; **Cloning and expression of cytosine deaminase gene.** The 17<sup>th</sup> Iranian Pharmacy Students seminar, November 7-9, 2012, Kermanshah, Iran, 41.

3- Gholami A., Mohkam M., Ghsaemi, Y.; **Isolation and identification of new polyhydroxyalkanoate (PHA) producing bacteria from an extreme environment.** Research in Pharmaceutical Sciences, 2012;7(5), Isfahan, Iran.

4- Gholami A., Abootalebi N., Ghasemi Y.; **Trends in PHA producing technology (a review).** European Biotechnology Congress, 28 September-1 October 2011, Istanbul, Turkey: [B3] [published in Current Opinions in Biotechnology 22S 2011; S15–S152: S87].

5- Gholami, A., Ebrahiminezhad, A., Rasoul-amini, S., Ghasemi, Y. **An *in vitro* study on biocompatibility and cytotoxicity of novel amino-alkanoic acid coated super-para magnetic nanoparticles compared with naked and amino acid coated ones,** Shiraz Pazhoresh Day, 2013, Shiraz, Iran.

6-Gholami A., Abbaszadegan S, Nabavizadeh A, Saliminasab M, Ghasemi Y; **Evaluation of antimicrobial activity of a novel endodontic nano-irrigant in comparison with sodium hypochlorite and chlorhexidine digluconate.** 7<sup>th</sup> Iranian Congress of Clinical Microbiology, October 19-21, 2013, Shiraz, Iran, P342.

7- Yasmin Ghahramani, Seyyed Abbas Abbaszadegan, Ahmad Gholami, Mohammadreza Nabavizadeh; **Comparison the antimicrobial effect of *Ferula gummosa* and *Myrtus communis* essential oils against persistent endodontic microorganisms compared**

**with sodium hypochlorite and chlorhexidine solutions**, The 16<sup>th</sup> International Congress of Iranian Association of Endodontists, 13-15 Aug 2014, Isfahan, Iran.

8- Yasmin Ghahramani, Seyyed Abbas Abbaszadegan, Ahmad Gholami, Safoora Sahebi; **Comparison the antibacterial effect of three herbal essential oils (Aloe Vera, Zataria Multiflora and Cinnamomum Zeylanicum) and calcium hydroxide as a medicament against Enterococcus Faecalis;**, The 16<sup>th</sup> International Congress of Iranian Association of Endodontists, 13-15 Aug 2014, Isfahan, Iran.

9- Ahmad Gholami, Alireza Ebrahiminezhad, Younes Ghasemi, **Impact of novel surface coated super-paramagnetic iron oxide nanoparticle on growth of bacterial strains**, 18<sup>th</sup> Iranian Pharmacy Students seminar, September 7-9, 2014, Tabriz, Iran.

10- Razmi, R., Gholami, A., Rezaee, Z., Ghasemi, Y. **A study on antibacterial and antifungal activity of some benzimidazole, imidazole and benzotriazole derivatives**, 18<sup>th</sup> Iranian Pharmacy Students seminar, September 7-9, 2014, Tabriz, Iran.

11- Ahmad Gholami, Alireza Ebrahiminezhad, Sara Rasoul-amini, Younes Ghasemi; **Biocompatibility and cytotoxicity of novel amino-alkanoic acid coated super-paramagnetic nanoparticles**, Iran NanoSafety Congress, February 19-20, 2014, Tehran, Iran.

12- A. Gholami, A. Abbaszadegan, H. Sharghi, Y. Ghasemi, **Cell cytotoxicity and anti-enterococcus activity of novel alkyl chain capped silver nanoparticles**, Shiraz Pazhohesh Day, 2014, Shiraz, Iran.

13. Gholami A, Farjami F, Ghasemi Y, Zeinali S. **L-Asparaginase Amperometric Biosensor Based on Polyaniline Multiwalled Carbon Nanocomposite Platinum Electrode**, 7<sup>th</sup> international conference on nanostructures (ICNS7), Feb 27-Mar 1, 2018, Tehran, Iran.

## Doctoral thesis supervisions and Collaborations:

- 1- Shahin Akbarabadi S. **Cloning of cytosine deaminase gene in *Escherichia coli***. Pharm. D thesis (2013). Shiraz University of Medical Sciences, Faculty of pharmacy.
- 2- Rashidinezhad F. **Synthesis and antibacterial evaluation of some novel designed mono-imidazole and bis-imidazole derivatives**. Pharm. D thesis (2013). Shiraz University of Medical Sciences, Faculty of pharmacy.
- 3- Fallahzadeh Z. **antibacterial evaluation of some novel designed azole derivatives**. Pharm. D thesis (2012). Shiraz University of Medical Sciences, Faculty of pharmacy.
- 4- Kiani A; Delroba AR; **Antibacterial effects of *Zataria multiflora* Boiss and *Aloe vera* in comparison with calcium hydroxide in infected teeth with *E.faecalis***. . DMD thesis (2013). Shiraz University of Medical Sciences, School of dentistry.
- 5- Saliminasab M; **Antimicrobial activity of *Ferrula Gummosa* species on persistent endodontic microorganisms:An In Vitro Study**. DMD thesis (2013). Shiraz University of Medical Sciences, School of dentistry.
- 6- Dadolahi Sarab S; **Comparison of the antibacterial activity of *Cinnamomum Zeylanicum* essential oil, tri-mixed antibiotics and calcium hydroxide as intracanal medicaments on infected teeth with *E.faecalis*: an in vitro study**. DMD thesis (2013). Shiraz University of Medical Sciences, School of dentistry.
- 7- Sheikhiani R; **Chemical Composition and Antimicrobial activity of essential oil of *Myrtus Comminus* (Myrtle) species on persistent endodontic microorganisms: An In Vitro Study**. DMD thesis (2013). Shiraz University of Medical Sciences, School of dentistry.
- 8- Ghasemi Firouzabadi S; **Isolation of probiotic bacteria and detection of total protein and total lipid in traditional food “sorou”**. Pharm. D thesis (2014). Shiraz University of Medical Sciences, Faculty of pharmacy.
- 9- Roshanfard F; **Characterization and *in vitro* evaluation of probiotic *Lactobacillus reuteri* (ATCC 23272) for supplement preparation**. Pharm. D thesis (2014). Shiraz University of Medical Sciences, Faculty of pharmacy.
- 10- Yazanparast SR, Saberinezhad M; **An evaluation of antimicrobial efficacy of sodium hypochlorite and calcium hypochlorite in different temperatures in infected root**

- canals of extracted teeth.** DMD thesis (2014). Shiraz University of Medical Sciences, School of dentistry.
- 11- Abootalebi N; **The evaluation of probiotic substance insisting *Bacillus coagulans* on viral acute diarrhea in children compared with Zinc supplement.** Medicinal Specialist Thesis (Pediatrics, 2015). Yasouj University of Medical Sciences, Faculty of Medicine.
  - 12- Kadkhoda Z; **Evaluation of antibacterial activity of an Endodontics nanoirrigant against *enterococcus faecalis* in root canal by quantitative real-time PCR.** Dental Specialist Thesis (Endodontics) (2014). Shiraz University of Medical Sciences, School of dentistry.
  - 13- Razmi R; **A study on antibacterial and antifungal activity of some benzimidazole, imidazole and benzotriazole derivatives.** Pharm. D thesis. (2015). Shiraz University of Medical Sciences, Faculty of pharmacy.
  - 14- Ghareghan R, Ghareghan M; **Comparison of the antimicrobial activity of cuminum cyminum and chlorhexidine on microorganisms isolated from previously root-filled teeth with persistent apical periodontitis.** DMD thesis. (2016). Shiraz University of Medical Sciences, School of dentistry.
  - 15- Ghafari P; **Antimicrobial effect of four positive-charged silver nanoparticles and their effects on biofilm formation.** Pharm D thesis on Pharmaceutical Biotechnology. (2016). Shiraz University of Medical Sciences, Faculty of pharmacy.
  - 16- Zargarnejad, Z. **Synthesis and Preparation of Lipoamino Acid Conjugate of Isoniazid coating on Superparamagnetic Iron Oxide Nanoparticles and It's Antimicrobial Evaluation.** Pharm. D thesis (2017). Shiraz University of Medical Sciences, Faculty of pharmacy.
  - 17- Emadi, F. **Functionalized Graphene Oxide with Chitosan for Protein Nanocarriers to Protect against Enzymatic Cleavage and Retain Collagenase Activity.** Pharm. D thesis (2017). Shiraz University of Medical Sciences, Faculty of pharmacy.
  - 18- Nazem, M. **anti-neoplastic Etoposide delivery using nanoparticles to human cells and cellular toxicity evaluation by molecular techniques.** Pharm. D thesis (2017). Shiraz University of Medical Sciences, Faculty of pharmacy.



- 19- Raei J; **Stabilization of recombinant E.coli cells with amino acid attached iron oxide nanoparticles and evaluation of plasmid stability and secretion of the enzyme L-Asparaginase in stabilized cells.** PhD Thesis. (2018). Shiraz University of Medical Sciences, School of pharmacy.
- 20- Mortazavi R; **Cytotoxicity evaluation of some benzoxazine derivatives on HepG2 and SW1116 cell lines.** Pharm D thesis. (2018). Shiraz University of Medical Sciences, Faculty of pharmacy.
- 21- Azarang A; **The effects of probiotics Lactobacillus acidophilous, Bacillus coagulans, Lactobacillus casei, and Lactobacillus ruteri on nonalcoholic steatohepatitis induced in male rats.** Pharm D thesis. (2018). Shiraz University of Medical Sciences, School of pharmacy.
- 22- Salehi R; **Microbial contamination of some non- sterile traditional medicinal products prepared and marketed in Emadoddin shirazi clinic (2019).** Shiraz University of Medical Sciences, School of pharmacy.
- 23- Khoshghadam, F. **The effects of probiotics Lactobacillus acidophilous, Bacillus coagulans, Lactobacillus casei, and Lactobacillus ruteri on blood factors, sperms, liver and histological properties of reproductive tract in male rats.** Pharm D thesis. (2019). Shiraz University of Medical Sciences, School of pharmacy.
- 24- Hajighahremani, N. **Design and lab-scale production of an epitope-based vaccine against *Staphylococcus aureus* infections and its immunological evaluation in mice.** PhD Thesis. (2019). Shiraz University of Medical Sciences, School of pharmacy.
- 25- Jalali, S. **Synthesis and Characterization of Magnetic Nanoparticles Functionalized with Imidazolium Ionic Liquides and Their Potential in Transfection (2019).** Shiraz University of Medical Sciences, School of pharmacy.
- 26- Ghafaripour D; **Antimicrobial Efficacy of intracanal medicaments (Triple Paste Antibiotic and Calcium hydroxide) Against *E.Faecalis* Bacteria by Real-Time PCR: A Randomized Clinical Trial. Master of Science in Dentistry (Pediatrics, 2019).** Shiraz University of Medical Sciences, School of dentistry.
- 27-

## Teachings:

Pharmaceutical Biotechnology, Pharm.D students

Biological Products, Pharm.D students

Biology, Pharm.D students

Cellular and Molecular Biology, PhD students

Genetic Engineering and Molecular Genetics, PhD students

Nanobiotechnology, PhD students

Cell Culture, PhD students

Cellular and Molecular Biology, M.Sc. students

Nanobiotechnology, M.Sc. students

Nanomedicine, M.Sc. students

Systems Biology, PhD students

Immunopathology, M.Sc. students

Gene therapy, PhD students

**Professional Memberships:**

1- Medical council of Islamic Republic of Iran (2006)

2- Iran Pharmacists Association (2006)

3- Iranian Society of Nanomedicine (2018)

**Interests and extracurricular activities:**

- 1- Managing editor of White Line magazine (in Persian), 2013
- 2- Poetry, 1995-now
- 3- Member of Board of National Student Publications, 2002
- 4- Scientific secretary at the festival of poetry and fiction of Iranian Medical Universities, 2002 and 2003
- 5- Scientific counselor at the festival of sacred defense poetry of Iranian Universities, 2006.
- 6- Soccer, 1994-2017.
- 7- Attendance in Islamic Ethics Associations, 2002-2018.

### **Signature**

**Dr. Ahmad Gholami**

Pharm. D and PhD.