# Mahdi Rahaie Jahromi, Ph.D.

Faculty of New Science and Technology

University of Tehran

Tel (Direct): +98 (21)86093408

email: mrahaie@ut.ac.ir

Website:

**EDUCATION**

**Ph.D In Plant Breeding: Genetic Engineering and Molecular Genetics**University of Tehran 2005-2009  
**M.Sc In Agricultural Biotechnology**University of Tehran 2000-2003  
**B.Sc In Agronomy and Plant Breeding**Shiraz University 1994-1998

**PUBLICATIONS**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1200** | **19** | **61** | **40** | **3** |
| Citations | h-Index | Article | Conference | Book |

***Articles***

**1.** Design and Fabrication of a DNA‑copper Nanocluster‑based Biosensor for Multiple Detections of Circulating miRNAs in Early Screening of Breast Cancer. Sadeghi Samira sadat, Rahaie Jahromi Mahdi (2022)., JOURNAL OF FLUORESCENCE, 32(6), 2307–2297.  
  
**2.** Ultrasensitive electrochemical miR-155 nanocomposite biosensor based on functionalized/conjugated graphene materials and gold nanostars. Khosravi Fatemeh, Rahaie Jahromi Mahdi, Ghaani Mohammad Reza, Azimzadeh Taft Mostafa, Mostafavi Ebrahim (2022)., SENSORS AND ACTUATORS B-CHEMICAL, 375(15), 132877.  
  
**3.** valuation of biochemical factors and antioxidants derived from clone 100 Iranian tea and study on HCT-116 cell colon cancer in BALB /c mice. رهنما شهرزاد, Ebrahimi Asa, Mahjobi Frozandeh, Khosrowchahli Mahmood, Rahaie Jahromi Mahdi (2022)., journal of technology nutrition, 19(76), 45-60.  
  
**4.** A colorimetric biosensor based on peroxidase-like activity of CuO nanoparticles for simultaneous detection of microRNAs. Mahdie borujeni Mohadese, Rahaie Jahromi Mahdi, Shateri Fateme (2022)., CHEMICAL PAPERS, 76(10).  
  
**5.** Chemical, functional and therapeutic properties of encapsulated black cumin extract in Spirulina platensis. Shateri Fateme, Rahaie Jahromi Mahdi, Jalili Hasan (2022)., JOURNAL OF FOOD PROCESSING AND PRESERVATION, 46(8).  
  
**6.** Identification of pathways and genes with differential expression after cold stress in sugarcane, using Morphological, biochemical indices and RNA-seq analysis. Foladvand Mahmood, Ebrahimi Asa, Rahaie Jahromi Mahdi, Shariati Joni Vahid (2022)., Environment Stress in Crop Sciences, 15(2), 541-550.  
  
**7.** The Effect of Linoleic Acid and Nanoparticle Treatments as Inducers on Bio- mass and Fatty Acid Content in the Microalga, Haematococcus lacustris. Garshasbi Hamid, Jalili Hasan, Rahaie Jahromi Mahdi (2022)., journal of phycological research, 6(1).  
  
**8.** A novel DNA tweezers-based nanobiosensor for multiple detections of circulating exosomal microRNAs in breast cancer. Agahi Melika, Rahaie Jahromi Mahdi (2022)., ANALYTICAL BIOCHEMISTRY, 650(2022), 114697.  
  
**9.** The effects of several abiotic elicitors on the expression of genes of key enzymes involved in the parthenolide biosynthetic pathway and its content in feverfew plant (<i>Tanacetum parthenium</i> L.). Darbahani Mahsa, Rahaie Jahromi Mahdi, Ebrahimi Asa, Khosrowchahli Mahmood (2022)., NATURAL PRODUCT RESEARCH, 36(10), 1-5.  
  
**10.** Effect of Ginger Extract on 4T1 Breast Cancer Cell Line in Balb/c Mouse. Pooyae Gholizadeh Ali Reza, Ebrahimi Asa, Rahaie Jahromi Mahdi, Samiee Farzaneh (2021)., Clinical Cancer Drugs, 8(1), 43-49.  
  
**11.** Screening different cold-resistant sugarcane (Saccharum ssp. L) genotypes using morphological and biochemical indices. Foladvand Mahmood, Ebrahimi Asa, Rahaie Jahromi Mahdi, shariati vahid (2021)., Journal of Iranian Plant Ecophysiological Research, 16(63), 129-138.  
  
**12.** Nanostructures in non-invasive prenatal genetic screening. Sadeghi Samira, Rahaie Jahromi Mahdi, Ostad hasanzadeh maleki Bita (2021)., Biomedical Engineering Letters, 12(1), 3-18.  
  
**13.** A Novel Fluorescence Nanobiosensor based on Modified Graphene Quantum dots-HTAB for Early Detection of Fetal Sexuality with Cell Free Fetal DNA. Rahaie Jahromi Mahdi, Ostad Hassanzadeh Bita, Faridbod Farnoush (2021)., JOURNAL OF FLUORESCENCE, 31(6), 1-11.  
  
**14.** Four Matrix Metalloproteinase genes involved in murine breast cancer affected by ginger extract. Meysami Morteza, Rahaie Jahromi Mahdi, Ebrahimi Asa, Samiee Farzaneh (2021)., Gene Reports, 25(101332), 101332.  
  
**15.** A new ethosomal nanoparticle for controlled release of black cumin compounds against cancer cells. Nasri Shilan, Rahaie Jahromi Mahdi, Ebrahimi Hoseinzadeh Bahman, Hatamian Zaremi Ashraf Sadat, Sahraeian Razi (2021)., Nanomedicine Research Journal, 6(2), 158-169.  
  
**16.** A visible and colorimetric nanobiosensor based on DNA-CuO nanoparticle for detection of single nucleotide polymorphism involved in sickle cell anemia disease. Kasiri Mahsa, Rahaie Jahromi Mahdi (2021)., Materials Today Communications, 27(2021), 102423.  
  
**17.** Effect of mixed culture of yeast and microalgae on acetyl-CoA carboxylase and Glycerol-3-phosphate acyltransferase expression. Rezaee Ashtiani Fatemeh, Jalili Hasan, Rahaie Jahromi Mahdi, Seddighi Mahsa, abdeltif Amrane (2021)., JOURNAL OF BIOSCIENCE AND BIOENGINEERING, 132(1), 330337.  
  
**18.** Astaxanthin Production and Expression of its Metabolic Pathway Genes under the influence of Linoleic Acid and Nanoparticles in Microalga (Hematococcus Lacustris). حمید گرشاسبی, Fakheri Barat ali, Jalili Hasan, Rahaie Jahromi Mahdi, Mahdineghad Nafiseh (2020)., Tarbiyat Modares, 9(2), 144-155.  
  
**19.** Design, fabrication, and optimization of a dual function three-layer scaffold for controlled release of metformin hydrochloride to alleviate fibrosis and accelerate wound healing. Chogan Faraz, Mirmajidi Tahereh, Rezayan Ali Hossein, Sharifi Ali Mohammad, Ghahary Aziz, Nourmohammadi Kouhanestani Jhamak, Kamali Amir, Rahaie Jahromi Mahdi (2020)., ACTA BIOMATERIALIA, 113(113), 144-163.  
  
**20.** Expression of the defense-related genes in Guilan local bean (Phaseolus vulgaris L.) under the Sclerotium rolfsii fungus infection. Gholami Mehran, Ebrahimi Asa, Mozafari Javad, Bihamta Mohammadreza, Rahaie Jahromi Mahdi (2020).  
  
**21.** Thymoquinone‑loaded ethosome with breast cancer potential: optimization, in vitro and biological assessment. Nasri Shilan, Ebrahimi Hoseinzadeh Bahman, Rahaie Jahromi Mahdi, Hatamian Zaremi Ashraf Sadat, Sahraeian Razi (2020)., Journal Of Nanostructure in Chemistry, 10(1), 19-31.  
  
**22.** A nanobiosensor based on graphene oxide and DNA binding dye for multi-microRNAs detection. Rahaie Jahromi Mahdi, Khayat Noroozi Saman (2019)., BIOSCIENCE REPORTS, 39(12).  
  
**23.** Phenotypic and genotypic screening of common bean (Phaseolus vulgaris L.) landraces for resistance to collar rot fungus (Sclerotium rolfsii Sacc.) in North of Iran. Gholami Mehran, Ebrahimi Asa, Mozafari Javad, Bihamta Mohammadreza, Rahaie Jahromi Mahdi (2019)., JOURNAL OF PLANT PATHOLOGY, 2(6), 1-12.  
  
**24.** Different anti-inflammatory effects of Lactobacillus acidophilus and Bifidobactrum bifidioum in hepatocellular carcinoma cancer mouse through impact on microRNAs and their target genes. Heydari Zahra, Rahaie Jahromi Mahdi, Mohamadalizadeh Ali (2019)., Journal of Nutrition & Intermediary Metabolism, 16(2019), 100096.  
  
**25.** A conductive cell-imprinted substrate based on CNT-PDMS composite. Kavand Hanie, Rahaie Jahromi Mahdi, Koohsorkhi Javad, Haghighipour Nooshin, Bonakdar Shahin (2019)., BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, 1(1).  
  
**26.** The effect of TiO2 and SiO2 nanoparticles and salinity stress on expression of genes involved in parthenolide biosynthesis in Feverfew (Tanacetum parthenium L.). Khajavi Mahshid, Rahaie Jahromi Mahdi, Ebrahimi Asa (2019)., CARYOLOGIA, 72(1), 3-14.  
  
**27.** A signal-on nanobiosensor for VEGF165 detection based on supraparticle copper nanoclusters formed on bivalent aptamer. Mortazavi Moghadam Fatemeh, Rahaie Jahromi Mahdi (2019)., BIOSENSORS & BIOELECTRONICS, 132(2019), 186-195.  
  
**28.** Magneto - mechanical Stimulation of Bone Marrow Mesenchymal Stromal Cells for Chondrogenic Differentiation Studies. Kavand Hanie, Rahaie Jahromi Mahdi, Haghighipour Nooshin, Bonakdar Shahin, Koohsorkhi Javad (2018)., Journal of Computational Applied Mechanics, 49(2), 386-394.  
  
**29.** Effects of Lactobacillus acidophilus and Bifidobacterium bifidum Probiotics on the Expression of MicroRNAs 135b, 26b, 18a and 155, and Their Involving Genes in Mice Colon Cancer. Heidari Zahra, Rahaie Jahromi Mahdi, Alizadeh Ali Mohamad, Agah Shahram, Khalighfard Solmaz, Bahmani Sahar (2018)., Probiotics and Antimicrobial Proteins, 2019(2), 1-8.  
  
**30.** Expression of Defensive Genes Responsible for Direct and Indirect Defense Against Spider Mite Tetranychus urticae in Black Bean. Bouchani Ahmad, Tahmasebi Zahra, Rahaie Jahromi Mahdi (2017)., journal of crop breeding, 9(23), 35-43.  
  
**31.** Early detection of Alzheimer's disease using a biosensor based on electrochemically-reduced graphene oxide and gold nanowires for the quantification of serum microRNA-137. Azimzadeh Mostafa, Nasirzadeh Navid, Rahaie Jahromi Mahdi, Naderi-manesh Hossein (2017)., RSC Advances, 7(88), 55709-55719.  
  
**32.** Effect of nanoparticle treatment on expression of a key gene involved in thymoquinone biosynthetic pathway in Nigella sativa L.. Kahila Mir Mohammad Hassan, Najy Amin Mahdi, Rahaie Jahromi Mahdi, Mir-derikvand Mohammad (2017)., NATURAL PRODUCT RESEARCH, 32(6), 1-5.  
  
**33.** A Systematic Comparison of Biosurfactant Effects on Physicochemical Properties and Growth Rates of P. aeruginosa MM1011 and TMU56: A Bioremediation Perspective. Tazari Fatemeh, Rahaie Jahromi Mahdi, Hatamian Zaremi Ashraf Sadat, Jalili Hasan, Yazdian Fatemeh, Alizadeh Kordkandi Salman (2017)., BIOPROCESS ENGINEERING, 1(1), 14-20.  
  
**34.** Growth and physiological responses of Quercus brantii seedlings inoculated with Biscogniauxia mediterranea and Obolarina persica under drought stress. Ghanbary Ehsan, Tabari Kouchaksaraei Masoud, Mirabolfathy Mansoureh, Modarres Sanavi Seyyed Ali Mohammad, Rahaie Jahromi Mahdi (2017)., FOREST PATHOLOGY, 47(3), e12353.  
  
**35.** A Nanobiosensor Based on Fluorescent DNA-Hosted Silver Nanocluster and HCR Amplification for Detection of MicroRNA Involved in Progression of Multiple Sclerosis. Mansourian Niloofar, Rahaie Jahromi Mahdi, Hosseini Morteza (2017)., JOURNAL OF FLUORESCENCE, 27(3), 1-7.  
  
**36.** Electrochemical miRNA Biosensors: The Benefits of Nanotechnology. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirzadeh Navid, Daneshpour Maryam, Naderimanesh Hossain (2017)., Nanomedicine Research Journal, 1(3), 158-171.  
  
**37.** Design and Fabrication a Gold Nanoparticle-DNA Based Nanobiosensor for Detection of microRNA Involved in Alzheimer's Disease. Delkhahi Shokoufeh, Rahaie Jahromi Mahdi, Rahimi Fereshteh (2017)., JOURNAL OF FLUORESCENCE, 27(2), 1-8.  
  
**38.** Comparison of miRNA signature versus conventional biomarkers before and after off-pump coronary artery bypass graft. Fateme Pourrajab, Torkian Velashani Fereshteh, Khanaghaei Masoud, Hekmati Moghadam Seied Hosein, Rahaie Jahromi Mahdi, Zare-khormizi Mohamad Reza (2016)., JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, 134(2), 11-17.  
  
**39.** Rapid pre-symptomatic recognition of tristeza viral RNA by a novel fluorescent self-dimerized DNA– silver nanocluster probe. Shokri Ehsan, Hosseini Morteza, Faridbod Farnoush, Rahaie Jahromi Mahdi (2016)., RSC Advances, 101(6), 99437.  
  
**40.** Expression of the circulating and the tissue microRNAs after surgery, chemotherapy, and radiotherapy in mice mammary tumor. Farsinejad Sadaf, Rahaie Jahromi Mahdi, Alizadeh Ali Mohamad, Mir-derikvand Mohammad, Gheisari Zohreh, Nosrati Hassan, Khalighfard Solmaz (2016)., TUMOR BIOLOGY, 37(9), 1-10.  
  
**41.** Synthesis and Assessment of DNA/Silver Nanoclusters Probes for Optimal and Selective Detection of Tristeza Virus Mild Strains. Shokri Ehsan, Hosseini Morteza, Faridbod Farnoush, Rahaie Jahromi Mahdi (2016)., JOURNAL OF FLUORESCENCE, 26(5), 1795-1803.  
  
**42.** Stability and loading properties of curcumin encapsulated in chlorella vulgaris. Jafari Yaser, Sabahi Hossein, Rahaie Jahromi Mahdi (2016)., FOOD CHEMISTRY, 211(1), 700-706.  
  
**43.** Evaluation of drought tolerance in wild pear (Pyrus boissieriana Buhse). Zarafshar Mehrdad, Akbarnia Moslem, Hosseini Syed Mohsen, Rahaie Jahromi Mahdi (2016)., JOURNAL OF FOREST AND WOOD PRODUCTS (JFWP) (IRANIAN JOURNAL OF NATURAL RESOURCES), 69(1), 97-110.  
  
**44.** Circulating miR-126 and miR-499 reflect progression of cardiovascular disease; correlations with uric acid and ejection fraction. Khanaghaei Masoud, Tourkianvalashani Fereshtah, Hekmatimoghaddam Seyedhossein, Ghasemi Nasrin, Rahaie Jahromi Mahdi, Khorramshahi Vahid, Sheikhpour Akhtar, Heydari Zahara, Pourrajab Fatemeh (2016)., HEART INTERNATIONAL, 11(1), 1-9.  
  
**45.** An electrochemical nanobiosensor for plasma miRNA-155, based on graphene oxide and gold nanorod, for early detection of breast cancer. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirizadeh Navid, Ashtari Khadijeh, Naderi-manesh Hossein (2016)., BIOSENSORS & BIOELECTRONICS, 77(.), 99-106.  
  
**46.** Elevated levels of miR-499 protect ischemic myocardium against uric acid in patients undergoing off-pump CABG. Pourrajab Fatemeh, Sharifi Marzieh, Hekmati Moghaddam Seyed Hossein, Khanaghaei Masoud, Rahaie Jahromi Mahdi (2016)., COR ET VASA, 1(1), 1-9.  
  
**47.** Physiological and biochemical changes in wild pear tree (Pyrus boisseriana) seedlings in response to various levels of irrigation. Zarafshar Mehrdad, Akbarnia Moslem, Askari Hossein, Hosseini Syed Mohsen, Rahaie Jahromi Mahdi (2015)., Applied Biology, 28(1), 59-78.  
  
**48.** Application of Oracet Blue in a novel and sensitive electrochemical biosensor for detection of microRNA. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirizadeh Navid, Naderi-manesh Hossein (2015)., ANALYTICAL METHODS, 3(22), 1-17.  
  
**49.** The effect of foliar application of titanium dioxide nanoparticles to improve distractive effects of drought in wild pear plant (Pyrus biosseriana buhse). Zarafshar Mehrdad, Akbarnia Moslem, حسین عسکری, Hosseini Syed Mohsen, Rahaie Jahromi Mahdi (2015)., Journal of Plant Ecosystem Conservation, 3(6), 81-94.  
  
**50.** Toxicity Assessment of SiO2 Nanoparticles to Pear Seedlings. Zarafshar Mehrdad, Akbarnia Moslem, Askari Hossein, Rahaie Jahromi Mahdi, Struve Daniel (2015)., International Journal of Nanoscience, 11(1), 13-22.  
  
**51.** Application of nanoparticles for pesticides,herbicides, fertilisers and animals feed management. Mehazar Elham, Rahaie Jahromi Mahdi, Rahayee Somaye (2015)., International Journal of Nanoparticles, 8(1), 1-19.  
  
**52.** Use of sulfur-oxidizing bacteria as recognition elements in hydrogen sulfide biosensing system. Janfada Behdokht, Yazdian Fatemeh, Amoabediny Ghassem, Rahaie Jahromi Mahdi (2014)., BIOTECHNOLOGY AND APPLIED BIOCHEMISTRY, 62(3), 349-356.  
  
**53.** Recombinant production of mecasermin in E. coli expression system. Jafari Sevda, Babaeipour Valiollah, Eslampanah Seyedi H.a, Rahaie Jahromi Mahdi, محمدرضا مفید, Haddad L.., Namavaran M.m, Fallah Jalil (2014)., RESEARCH IN PHARMACEUTICAL SCIENCES, 9(6), 453-461.  
  
**54.** Morphological, physiological and biochemical responses to soil water deficit in seedlings of three populations of wild pear tree (Pyrus boisseriana). Zarafshar Mehrdad, Akbarinia Moslem, Askari Hossein, Hosseini Syed Mohsen, Rahaie Jahromi Mahdi, Struve Daniel, Striker Gustavo Gabriel (2014)., BIOTECHNOLOGIE AGRONOMIE SOCIETE ET ENVIRONNEMENT, 18(3), 353-366.  
  
**55.** Application of Proteomics Approach in Cancer and Infectious Diseases Studies. Tazari Fatemeh, Rahaie Jahromi Mahdi, Hatamian Zaremi Ashraf Sadat, Yazdian Fatemeh (2013)., Iranian Journal of Biotechnology, 11(42), 171.  
  
**56.** In Vitro Influences of TiO2 Nanoparticles on Barley ( Hordeum vulgare L . ) Tissue Culture. Mahnaz Mandeh, Omidi Mansoor, Rahaie Jahromi Mahdi (2012)., BIOLOGICAL TRACE ELEMENT RESEARCH, 150(1), 376-380.  
  
**57.** analysis of transcription factors.... Rahaie Jahromi Mahdi, مسعود گماریان, Alizadeh Houshang, محمد علی ملبوبی, Naghavi Mohammad Reza (2011)., Iranian Journal of Crop Sciences, 13(3), 580-595.  
  
**58.** A novel DNA-based nanostructure for single molecule detection purposes. Rahaie Jahromi Mahdi, Naghavi Mohammad Reza, Alizadeh Houshang, Mohammad Ali Malboobi, Krassen Dimitrov (2011)., International Journal of Nanotechnology, 8(6/7), 458-470.  
  
**59.** The Gene Expression Analysis of MYB Transcription Factors in Wheat (Triticum aestivem L.) During Short Term Salinity and Cold Stresses by Quantitative RT-PCR. Rahaie Jahromi Mahdi, محمدرضا نقوی, هوشنگ علیزاده, محمد علی ملبوبی, عبدمیشانی Sirous Abdmashyani, پییر شنک, گنگ پینگ ژو (2010)., Iranian Journal of Crop Sciences, 41(3), 433-446.  
  
**60.** A MYB gene from wheat (Triticum aestivum L.) is up-regulated during salt and drought stresses and differentially regulated between salt-tolerant and sensitive genotypes. Rahaie Jahromi Mahdi, Gang Ping Xue, Mohammad Reza Naghavi, Alizadeh Houshang, Peer M Schenk (2010)., PLANT CELL REPORTS, 29(8), 835-844.  
  
**61.** Lectin - based Biosensors : As Powerful Tools in Bioanalytical Applications. Rahaie Jahromi Mahdi, Seyyed Sanam Kazemi (2010)., Biotechnology, 9(4), 428-443.

***Books***

**1.** Bioentrepreuneurship-vol2. فرامرزپور مهندس محمد, Mir-derikvand Mohammad, مهندس محمد عنایت زاده, Rahaie Jahromi Mahdi (2014).  
  
**2.** Handbook of Bioentrepreneurship. مهندس محمد فرامرزپور, Mir-derikvand Mohammad, مهندس محمد عنایت زاده, Rahaie Jahromi Mahdi (2014).  
  
**3.** The Role of Transcription Factors in Wheat3 (Triticum aestivum L. Under Different Abiotic Stresses. Rahaie Jahromi Mahdi, Gang-ping Xue, Peer Schenk (2012).

***Conferences***

**1.** Gene Expression Analysis and RT-PCR. Rahaie Jahromi Mahdi (2022)., Second International Scientific Conference on Biology and Pure Sciences, 19-20 October, Mosul, Iraq.  
  
**2.** Design and fabrication of DNA-based nanobiosensors for early diagnosis of genetic diseases. Rahaie Jahromi Mahdi (2022)., The 3rd national conference on micro/nanotechnology, 20 July, Qazvin, Iran.  
  
**3.** Design, fabrication and commercialization in biosensor technology. Rahaie Jahromi Mahdi (2021)., Iran-Philippines International Symposium on Agricultural Nanotechnology, 18-19 November.  
  
**4.** production of Cydia pomonella pheromone content nanocarriers and evaluation of its targeted release in pests biological control. Madani Mohammad, Tabrizian Mehrdad, Jalilian Ali, Rahaie Jahromi Mahdi (2019)., 2th national conference for Agriculture development and safe earth, 19 March.  
  
**5.** Effect of extract and essential oil of different medicinal plants and nanoparticles on growth of barley seed explant in culture media. Omidbakhsh Nazanin Zahra, Rahaie Jahromi Mahdi, Pejmanmehr Maryam (2019)., the 2th International Conference of Medicinal Plants, Organic Farming, Natural and Medicinal Materials, 13 March, Mashhad, Iran.  
  
**6.** Introducing an electrochemical nanobiosensing method for Alzheimer detection based on reduced-graphene oxide and Au nanowire. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirzadeh Navid, Naderi-manesh Hossein (2017)., 2nd Nanomedicine & Nanosafety Conference, 29-30 November, Tehran, Iran.  
  
**7.** Optimization an ethosomic nanocarrier end trapped plant compound for cancer treatment. Nasri Shilan, Rahaie Jahromi Mahdi, Ebrahimi Hoseinzadeh Bahman, Hatamian Zaremi Ashraf Sadat, Barghi Amid (2017)., 2nd Nanomedicine & Nanosaftey Conference, 29-30 November, Tehran, Iran.  
  
**8.** Enhancing the sensitivity of an electrochemical biosensing of microRNA-155 using gold nanorod-decorated graphene oxide: comparing two different approaches. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirzadeh Navid, Naderi-manesh Hossein (2017)., 2nd Nanomedicine & Nanosafety Conference, 29-30 November, Tehran, Iran.  
  
**9.** Design and optimization of transdermal drug delivery system containing natural extract for targeting. Barghi Amid, Ebrahimi Hoseinzadeh Bahman, Hatamian Zaremi Ashraf Sadat, Rahaie Jahromi Mahdi, Nasri Shilan (2017)., International Conference on Nanofibers, 21-22 October, Tehran, Iran.  
  
**10.** Investigation of P53 gene expression in blood accordance with breast cancer of 4T1 cell category under treating by ginger extract in Balb-c mice. Pooyae Gholizadeh Ali Reza, Ebrahimi Asa, Rahaie Jahromi Mahdi, فرزانه سمیعی (2017)., 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran, 29-31 August, Karaj, Iran.  
  
**11.** Diagnosis of prenatal genetic disease by nanobiotechnology approaches. Ostad Hassanzadeh Bita, Kasiri Mahsa, Rahaie Jahromi Mahdi (2017)., 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran, 29-31 August, Karaj, Iran.  
  
**12.** Isolation of housekeeping gene, quantitative gene expression analysis in Pistacia L. under salt stress condition. Hamiditabar Zeynab, Ebrahimi Asa, Rahaie Jahromi Mahdi, رضا عزیزی نژاد (2017)., 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran, 29-31 August, Karaj, Iran.  
  
**13.** Survery of the Toxicity and Inhibition Ginger Extract on MDA-MB-231 Cell Line in Balb-C Mice. Sedigh Mina, Ebrahimi Asa, فرزانه سمیعی, Rahaie Jahromi Mahdi (2017)., 2nd International and 10th National Biotechnology Congress of Islamic Republic of Iran, 29-31 August, Karaj, Iran.  
  
**14.** Design and Validation of an Interferon IFNγ Aptamer. Mortazavi moghadam Fatemeh alsadat, Rahaie Jahromi Mahdi, Rezayan Ali Hossein, Ryon Shin Su., Avci-adali Meltem (2017)., The Third International Congress of Immunology, Asthma & Allergy, 15-17 February, Tehran, Iran.  
  
**15.** Effect of nanoparticles treatment on Expression of gene (GPPS) involved in Thymoquinon biosynthesis pathway in Nigella sativa L.. Kahila Hasan, Najy Amir Mahdi, Rahaie Jahromi Mahdi (2016)., 2th international and 14th iranian genetics congress, 21-23 May, Iran.  
  
**16.** Tio2 Nanoparticle effect on CARS and GAS genes expression in feverfew (Tanacetum parthenium L.). Khajavi Mahshid, Rahaie Jahromi Mahdi, Ebrahimi Asa (2016)., 2th international and 14th Iranian genetics congress, 21-23 May.  
  
**17.** Design and fabrication of a novel nanobiosensor for early detection of breast cancer using signal amplification of thegold nanorods decorated on graphene oxide sheets. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirzadeh Navid, Naderi-manesh Hossein (2016)., 11th international Breast Cancer Congress, 24-26 February, Tehran, Iran.  
  
**18.** Electrospinning a polymer latex nano-capsules for controlled release of pesticides. Madani Mohammad, Jalilian Ali, Rahaie Jahromi Mahdi, Ganjali Mohammadreza (2016)., first national congress of Agriculture development and Healthy earth, 20 January, Tehran, Iran.  
  
**19.** The impact of nanomaterials on signal amplification in a miRNA electrochemical sensor. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirzadeh Navid, Naderi-manesh Hossein (2015)., 11th Annual Electrochemistry Seminar of Iran, 18-19 November, Tehran, Iran.  
  
**20.** The recent advances in electrochemical biosensors for miRNA quantification. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Nasirzadeh Navid, Naderi-manesh Hossein (2015)., 11th Annual Electrochemistry Seminar of Iran, 18-19 November, Tehran, Iran.  
  
**21.** Gene transferring in algae using GUS reporter gene by electroporation. Niksefat Tayyobeh, Askari Hossein, Rahaie Jahromi Mahdi, Tohedfar Masood (2015)., 1th international and 9th national biotechnology congress of islamic republic of iran, 24-26 May, Iran.  
  
**22.** MicroRNA as a biomarker for early cancer diagnosis. Heydari Zahara, Rahaie Jahromi Mahdi (2015)., 1th international and 9th national biotechnology congress of islamic republic of iran, 24-26 May, Iran.  
  
**23.** The role of microRNA biomarkers for multiple sclerosis (MS) diagnosis. Mansourian Niloofar, Rahaie Jahromi Mahdi, Delkhahi Shekufa (2015)., 1th international and 9th national biotechnology congress of Islamic republic of Iran, 24-26 May, Tehran, Iran.  
  
**24.** Effect of Bifidobacterium bifidum on microRNA-155-5p and PU.1 expression in colorectal cancer. Heydari Zahara, Rahaie Jahromi Mahdi, علیزاده علی محمد (2015)., 1th international and 9th national biotechnology congress of islamic republic of iran, 24-26 May, Tehran, Iran.  
  
**25.** designing and synthesis of DNA based nanostructure to detect hepatits B virus using FRET. Moafi Samaneh, Rahaie Jahromi Mahdi, Poostchi Hossein, Mohammadkhani Ashraf (2015)., Asian nanoforum conference (ANFC2015), 8-11 March, Kish, Iran.  
  
**26.** Detection of miRNA biomarkers based on gold nanoparticles biosensor. Mokhtari Mahsa, Ardjmand Mehdi, Rahaie Jahromi Mahdi, Nikfarjam Alireza (2014)., 2nd International Conference on Nanotechnology (ICN 2014), 9-11 July, İSTANBUL, Turky.  
  
**27.** Early diagnostics of cancer using bacterial bioluminescent imaging in small animal. Heydari Zahara, Rahaie Jahromi Mahdi (2014)., first international and 13th iranian genetic congress, 24-26 May, Tehran, Iran.  
  
**28.** Early Diagnosis of Nervous System Disease Using Nanobiosensor with focusing on Alzheimer’s disease. Rahaie Jahromi Mahdi, Delkhahi Shekufa, Mansourian Niloofar (2014)., first international and 13th iranian genetic congress, 24-26 May, Tehran, Iran.  
  
**29.** Gold nanoparticle: an efficient delivery system for transfection of siRNA into breast cancer cell. Azimzadeh Mostafa, Rahaie Jahromi Mahdi, Naderimanesh Hossain (2014)., the 9th international breast cancer congress, 26-28 February, Tehran, Iran.  
  
**30.** Design and Fabrication of Interdigitated Microelectrode-based Biosensor for Label-free detection of DNA. Sherkat Habib, Nikfarjam Alireza, Rahaie Jahromi Mahdi (2014)., ICMEMS2014, 18-19 February, Tehran, Iran.  
  
**31.** Integrated LC resonator as a detector of colloidal nanoparticles for bio-sensing applications. Sherkat Habib, Nikfarjam Alireza, Rahaie Jahromi Mahdi, Naghavi Mohammad (2014)., ICEEM2014, 8-9 January, Tehran, Iran.  
  
**32.** Enhancement of production of recombinant human IGF-I protein in non continuous culture in E.coli. Jafari Sevda, Babaeipour Valiollah, Rahaie Jahromi Mahdi, Mofid Mohammad Reza, Fallah Jalil (2013)., 8th islamic republic of iran biotechnology congress and 4th iranian biosafety congress, 6-8 July, Tehran, Iran.  
  
**33.** cloning, expression and purification of human recombinant IGF-I protein in Escherichia coli. Jafari Sevda, Rahaie Jahromi Mahdi, Babaeipour Valiollah, Mofid Mohammad Reza, Fallah Jalil (2013)., 8th islamic republic of iran biotechnology congress and 4th iranian biosafety congress, 6-8 July, Tehran, Iran.  
  
**34.** Approaches to detect matrix metalloproteinases (MMPs) as disease biomarkers. Gheisari Zohreh, Rahaie Jahromi Mahdi (2013)., 3th international student biotechnology congress, 6-8 May, Tehran, Iran.  
  
**35.** MicroRNA Profiling as a New Approach for Early Detection of Breast Cancer. Farsinejad Sadaf, Rahaie Jahromi Mahdi (2013)., 3th international student biotechnology congress, 5-8 May, Tehran, Iran.  
  
**36.** Application of Proteomics Approach in Cancer and Infectious Diseases Studies. Tazari Fatemeh, Rahaie Jahromi Mahdi, Hatamian Zaremi Ashraf Sadat, Yazdian Fatemeh (2013)., 13 th ICB & 5th ICBMB, 16-19 April, Yazd, Iran.  
  
**37.** application of nanostructures for MicroRNA analysis. Farsinejad Sadaf, Rahaie Jahromi Mahdi (2013)., the 5th international congress of biochemistry and molecular biology & 13th iranian congress of biochemistry, 16-19 April, Yazd, Iran.  
  
**38.** application of proteomics approach in cancer and infectious diseases studies. Tazari Fatemeh, Rahaie Jahromi Mahdi, Hatamian Zaremi Ashraf Sadat, Yazdian Fatemeh (2013)., 13th iranian congress of biochemistery&5th international congress of biochemistry@molecular biology, 16-19 April, Iran.  
  
**39.** strategies for efficient expression of disulfide bond containing proteins in E. coli. Babaeipour Valiollah, Jafari Sevda, Rahaie Jahromi Mahdi, Mofid Mohammad Reza, Fallah Jalil (2012)., 12th iranian genetics congress, 21-23 May, Tehran, Iran.  
  
**40.** The application of Titanium oxide, TiO2, nano particles in fungal contamination in Cycas revoluta in vitro culture. محیسنی خدیجه, Naderi Rohangiz, Omidi Mansoor, مانده مهناز, Rahaie Jahromi Mahdi (2011)., 1st National Congress and Workshop on Nanoscience and Nanotechnology, 16-18 February, Yazd, Iran.

**HONORS and AWARDS**

**An electrochemical nanobiosensor for plasma miRNA-155, based ongraphene oxide and gold nanorod, for early detection of breast cancer** 2020, Tehran, Iran

**ACADEMIC POSITIONS**

**Scientific Committee member**  
 2021-Present

**COURSES OFFERED**

**Nanobiotechnology in Industry and Environment  
  
Biosensors  
  
Molecular Biotechnology  
  
Applied Molecular and Cell Biology  
  
Computational Biology: Protein and Gene Analysis  
  
Cell and Tissue Culture  
  
Chemical and Bio Sensors  
  
Nanobiotechnology in Industry and Environment  
  
Biosensors  
  
Molecular Biotechnology  
  
Applied Molecular and Cell Biology  
  
Cell and Tissue Culture  
  
Chemical and Bio Sensors  
  
Nanobiotechnology in Industry and Environment  
  
Biosensors  
  
Molecular Biotechnology  
  
Applied Molecular and Cell Biology  
  
Cell and Tissue Culture  
  
Chemical and Bio Sensors  
  
Applied Molecular and Cell Biology  
  
Cell Culture and Molecular Biology  
  
Laboratory for Nanobiotechnology  
  
Chemical and Bio Sensors  
  
Information Technology in Nanobiotchnology  
  
Molecular Biotechnology  
  
Biosensors  
  
Cell Culture and Molecular Biology  
  
Laboratory for Nanobiotechnology  
  
Laboratory for Nanobiotechnology  
  
Laboratory for Nanobiotechnology  
  
Molecular Biotechnology  
  
Cell Culture and Molecular Biology  
  
Information Technology in Nanobiotchnology  
  
Bioreactors in medical engineering  
  
Cell and Tissue Culture Principles  
  
Laboratory for Nanobiotechnology  
  
Molecular Biotechnology  
  
Design of Experiments  
  
Laboratory for Nanobiotechnology  
  
Molecular Biotechnology**

**LABORATORIES**

**Plant cell & Tissue culture Lab**