

CURRICULUM VITAE

PERSONAL INFORMATION

First name: Seyed Mohammad
Surname: Moshtaghioun
Date of Birth: 21 September 1970
Sex: Male **Status:** Married **Nationality:** Iranian



Biology Department, Faculty of Sciences, Yazd University, Pajoohesh Ave.,
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EDUCATION

GRADUATE

CSIC – Institute of Biocatalysis – Madrid/Spain
Directed evolution of enzymes

Sabbatical Research

October 2010 – April 2011

National Institute for Genetic Engineering & Biotechnology

Major: Biology (Molecular Genetics)

Degree: PhD.

January 2007 – September 2011

Tehran University

Major: Cell & Molecular Biology

Degree: M.S.Ph.

September 1996 – November 1999

UNDERGRADUATE

Isfahan University

Major: Microbiology

Degree: B.Sc.

September 1992 – January 1996

Shahid Sadoughi University of Medical Sciences-Yazd

Major: Laboratory Sciences

Degree: Technician

September 1989 – October 1991

AWARDS

- First Student in B.Sc. Degree in Microbiology - Isfahan University – 1996.
- Second Student in M.S.Ph. Degree in Cell & Molecular Biology - University of Tehran – 1999.
- PhD scholarship - Ministry of Science, research and Technology of I.R.Iran – 2008.
- Sabbatical Research scholarship - Ministry of Science, research and Technology of I.R.Iran – 2010.

WORK EXPERIENCE

- Yazd University – Biology Department
August 2001 – January 2007, August 2014 – August 2018
Position: Head of Biology Department
From August 2001 to present date
Position: Academic Member
Lecturer of Genetics, Microbiology, Protozoology, Cell and Molecular Biology & General Biology Courses for Environmental Eng. & Biology Students.
Responsible for Biology Department Establishment Project: Laboratories Setting & ...
- Yazd Science & Technology Park
March 2004 – July 2004
Position: Advisor of Enterprises Affairs
October 2002 – March 2004
Position: Manager of Enterprises Affairs
November 2001 – October 2002
Position: Secretary of Executive Board
- Research & Clinical Centre for Infertility, Yazd
From March 2001
Position: Research Biologist
- University of Science & Arts (Yazd branch)
August 2010 – January 2017
Position: Invited Academic Member
Lecturer of Genetics, Genome Organization & Genetics of Prokaryotes.
- Islamic Azad University (Ashkezar branch)
August 2011 – January 2016
Position: Invited Academic Member
Lecturer of Genetic Engineering & Genetics of Cancer.

- Payame Noor University (Meybod, Yazd & Taft branches)
August 2004 – August 2007
Position: Invited Academic Member
Lecturer of Genetics, Microbiology, General Biology, Protozoology, Cell & molecular biology, Recombinant DNA Technology, Biophysics of Life Origin & Evolution.
- Shahid Seyed Mustafa Khomeini Hospital, Khorasan – Tabas
From November 1991 to June 1992
Position: Laboratory Technician

STRATEGIC & RESEARCH COUNCILS

- Member of Yazd Council for Stem Cell & Regenerative Medicine Sciences and Technologies
From July 2015
- Member of Research Council of Research Center for Food Hygiene and Safety
From August 2016
- Member of Research Council of Stem Cell Biology Research Center of Yazd Reproductive Sciences Institute
From July 2019
- Member of Research Council of Abortion Research Center
From July 2018

SCIENTIFIC SOCIETIES

- Iranian Biotechnology Society
From November 2004
Position: Associate Member
- Iranian Genetics Society
From November 2004
Position: Associate Member
- Biosafety Society of Iran
From November 2004
Position: Associate Member
- Iranian Tissue Engineering and Regenerative Medicine Society (ITERMS)
From July 2018
Position: Associate Member

PROJECTS

- Evaluation of Semen Parameters in Yazd Rubber Industry Workers
- Evaluation of Semen Parameters in Lead Mines Workers in Yazd Province
- Survey on Chromosome-gene defects on infertile men.
- Primary Studies & Design of Yazd Science & Technology Park Primary Incubator
- Cumulative Design Studies of Yazd Research Park & Executing Those Infrastructure
- Study of Effects of Extremely-low-frequency Pulsed Electromagnetic Fields on Collagen Synthesis in Rat Lung.
- Designing of a Hydrogen Peroxide Biosensor based on Polyaniline-Hb Modified Glassy Carbon Electrode.
- Isolation, Screening and Transfer of Cellulase Gene from *Bacillus subtilis* to Lysine Producing Mutants of *Brevibacterium flavum*.
- Investigation of Polymorphisms in Exon 2 of *BMP15* Gene and Exon 9 of *ALK6* Gene in Iranian Infertile Women with Premature Ovarian Failure Compared to Healthy Women.
- Identification of Mitochondrial *tRNA^{Lys, Ser, Leu (UUR) & Leu (CUN)}* Genes Mutations in Iranian Women with Idiopathic Recurrent Pregnancy Loss.
- Durability Evaluation of Human Vaginal Epithelial Cells on Electrospun Silk Fibroin/Polyurethane Scaffold.
- An Evaluation of Electrospun Silk Fibroin/Polyurethane Scaffold Compatibility for Human Embryonic Stem Cells Growth.
- Evaluation of Markers of Breast, Ovarian and Gastric Cancer Markers in Rats Fed Transgenic Tarom Molai Rice.
- An Evaluation of Electrospun Silk Fibroin/Polyurethane Scaffold Compatibility for Epithelial Cells Derived from Human Embryonic Stem Cells.
- Isolation of Human Vaginal Stem Cells and Evaluation of Mesenchymal Characters.
- Prediction of oocyte developmental competence using differential gene expression profile in cumulus cells entoured the oocyte of Iranian patients with polycystic ovary syndrome compared to healthy women.
- Yazd University Green Management Comprehensive Plan.
- Fabrication of hybrid scaffolds with adjustable characteristics for soft tissue engineering applications

CONGRESS & SEMINARS

- Moshtaghioun SM., Elahi E., et al. Isolation of *EcoRI* from a High Producing Strain and a Restriction Enzyme from a Local Bacterium. The 8th Iranian Biology Conference. Kermanshah – Iran - 1999.

- Moshtaghioun SM., Elahi E., et al. Isolation & Purification of *EcoRI* from a High Producing Strain. The First Iranian Biotechnology Conference Proceeding. Tehran – **2000**.
- Moshtaghioun SM., Elahi E., et al. Isolation & Purification of *EcoRI* from a High Producing Strain. The First Iranian Biotechnology Conference. Tehran – Iran - **2000**.
- Moshtaghioun SM., Supportive Services in STPs & Incubators. The 3th Congress of Iranian STPs & Incubators Directors. Yazd – Iran - **2004**.
- Moshtaghioun SM., Rezaei-Zarchi S., Effects of Extremely-low-frequency Pulsed Electromagnetic Fields on Collagen Synthesis in Rat Lung. 31th FEBS Congress. The FEBS Journal, 273, PP-1069. Istanbul -Turkey - **2006**.
- Moshtaghioun SM., Rezaei-Zarchi S., Hydrogen Peroxide Biosensor based on Polyaniline-Hb Modified Glassy Carbon Electrode. Tehran – Iran – IBC **2006**.
- Moshtaghioun S. M. , Javed A. , Rezaei-Zarchi S., Isolation, Screening and Transfer of Cellulase Gene from *Bacillus subtilis* to Lysine Producing Mutants of *Brevibacterium flavum*. The 9th Iranian Congress of biochemistry & the 2th International Cogress of Biochemistry and Molecular Biology. Shiraz - Iran – **2007**.
- Haghbeen K., Moshtaghioun S. M., Legge R.L., Xerogels: Potentials and Drawbacks for Enzymes Immobilization. The 6th National Biotechnology Congress of Iran Proceeding. Tehran-Iran – **2009**.
- Moshtaghioun S. M., Haghbeen K., A Direct and Accurate Spectrophotometric Method for Assaying the Laccase Activity. OxiZymes & 9th International Symposium on Peroxidases. Leipzig - Germany - **2010**.
- Moshtaghioun S. M., Haghbeen K., Interesting Results from the Preliminary Studies on the Optimization of the *Neurospora crassa* (FGSC #321) Growth and Laccase Production. The 16th National and 4th International Conference of Biology. Mashad – Iran – **2010**.
- Diana Maté, Eva García-Ruiz, Mohammad Moshtaghioun, Susana Camarero, Miguel Alcalde, Directed evolution of a high-redox potential laccase in *Saccharomyces cerevisiae*: improving functional expression, thermostability and kinetic properties. Madrid – Spain – CMIBM **2010**.
- Moshtaghioun S. M., "A Direct and Accurate Spectrophotometric Method for Assaying Laccase" Oral presentation, Madrid-Spain-ICP-CSIC, February **2011**.

- Bahremandjooy K., Moshtaghioun S. M., Haghbeen K., Catalytic activity of laccase from *Neurospora crassa* in the presence of organic solvents. The 7th National Biotechnology Congress of Iran. Tehran-Iran – **2011**.
- Dadkhah M., Moshtaghioun S. M., Haghbeen K., Investigation of tyrosinase production by *Neurospora crassa*. The 7th National Biotechnology Congress of Iran. Tehran-Iran – **2011**.
- Mehri Khatami, Mohammad Mehdi Heidari, Seyed Mohammad Moshtaghioun, Monireh Eghbali, Mitochondrial DNA mutation at 14766C>T in Iranian long QT syndrome patients. 13th ICB & 5th ICBMB. Yazd-Iran – **2013**.
- Mohammad Mehdi Heidari, Mehri Khatami, Alireza Talebi, Fahime Moezzi, Seyed Mohammad Moshtaghioun, A novel mutation in TNP2 gene in Iranian varicocele infertile men. The Third Iranian Congress of Medical Genetics. Tehran-Iran – **2013**.
- Mehri Khatami, Mohammad Mehdi Heidari, Seyed Mohammad Moshtaghioun, Zahra Saghachi, Identification of angiotensin gene mutations in atherosclerosis patients. The Third Iranian Congress of Medical Genetics. Tehran-Iran – **2013**.
- Khatami, M; Heidari, MM; Dianat, T; Moshtaghiun, M; Mutation Analysis of Mitochondrial *ND4L* Gene in Iranian Infertile Men with Varicocele. International Journal of Fertility & Sterility, 7, PP-131, Royan Institute of Iran. Tehran-Iran–**2013**.
- Ali Benvidi, Afsaneh Dehghani Firouzabadi, Seyed Mohammad Moshtaghioun, Mohammad Mazloun Ardakani, Marzieh Dehghan Tezerjani, A Label Free biosensor by glassy carbon electrode modified with graphen and gold nanoparticles for detecting breast cancer. 1st International & 13th Iranian Genetics Congress. Tehran-Iran – **2014**.
- Kohandani, F; Moshtaghioun, SM; Shahhoseini, M; Evaluation of expression level of *BRDT* gene in testis tissues of infertile men referred to ROYAN Institute. 8th IRHRC ANNUAL MEETING REPRODUCTIVE AND INFERTILITY UPDATES. Tehran-Iran-**2015**.
- Tezerjani, Marzieh Dehghan; Benvidi, Ali; Jahanbani, Shahriar; Ardakani, Mohammad Mazloun; Moshtaghioun, Seyed Mohammad; Developing an Electrochemical Biosensor by Using a Modified Glassy Carbon Electrode with Reduced Graphene Oxide for Detection of Breast Cancer Mutation. 18th Iranian Chemistry Congress. Semnan-Iran-**2015**.
- Tezerjani, Marzieh Dehghan; Benvidi, Ali; Jahanbani, Shahriar; Ardakani, Mohammad Mazloun; Moshtaghioun, Seyed Mohammad; Comparison of impedimetric detection of DNA hybridization on the modified glassy carbon electrode by using pyrene derivative and nanomaterials. 18th Iranian Chemistry Congress. Semnan-Iran-**2015**.

- Amiri Bahmanshiri, Mona; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Genetic variations of *GDF9* Gene in Iranian Infertile Women. Second International & Fourteenth Iranian Genetics Congress. Tehran-Iran-**2016**.
- Zarrin, Parvane; Moshtaghioun, Seyed Mohammad; Ghasemi, Nasrin; Ashrafzadeh, Hamid Reza; Falahati, Ali; Genetic variations in exon 2 of *BMP15* gene and exon 9 of *ALK6* gene in Iranian infertile women with premature ovarian failure. Second International & Fourteenth Iranian Genetics Congress. Tehran-Iran-**2016**.
- Haghghi, Marjan; Moshtaghioun, Seyed Mohammad; Anvari, Morteza; Falahati, Ali; *BMP6* and *BMP2* gene polymorphisms in Iranian women with polycystic ovary syndrome. Second International & Fourteenth Iranian Genetics Congress. Tehran-Iran-**2016**.
- Amiri Bahmanshiri, Mona; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Evaluation of genetic variations of *GDF9* and *ALK5* genes in Iranian infertile women. The 2nd international congress on reproduction. Tehran-Iran-**2016**.
- Kohandani, Fereshteh; Moshtaghioun, Seyed Mohammad; Shahhoseini, Maryam; Association of epigenetic role of BRDT in spermatogenesis and male infertility. The 13th international congress of human genetics-ICHG2016. Kyoto-Japan-**2016**.
- Fazel, Nasim; Moshtaghioun, Seyed Mohammad; Genetic Variations of *SERPINA5* Gene Correlated to High Risk of Papillary Thyroid Cancer in Iranian Patients. 2th International & 14th Iranian Genetics Congress. Tehran-Iran-**2016**.
- Ahmadi, Mahbbobeh; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Association of the *CHRNA3 rs1051730* single nucleotide polymorphism with lung cancer risk and prognosis in Iranian patients. 3th Iranian Molecular Medicine Congress. Isfahan-Iran-**2016**.
- Tezerjani, Marzieh Dehghan; Benvidi, Ali; Rezaeinasab, Masoud; Jahanbani, Shahriar; Moshtaghioun, Seyed Mohammad; Majidzadeh, Maryam; Youssefi, Mostafa; Zarrini, Kamran; An impedimetric biosensor based on composite of graphene nano sheets and poly aniline as a suitable platform for prostate cancer detection. THE 23rd IRANIAN SEMINAR OF ANALYTICAL CHEMISTRY. Tehran-Iran-**2016**.
- Tohidinia, Maryam; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Sefid, Fatemeh; Evaluation of linear and conformational epitopes CarO protein in *Acinetobacter baumannii*. The 2nd International and 10th National Iranian Biotechnology Congress. Tehran (Karaj)-Iran-**2017**.
- Barzegari dehaj, A.; Khajeh Mehrizi, M.; Moshtaghioun, S.M.; CHITOSAN HONEY POLY VINYL ALCHOL NANOFIBER AND STUDY OF THEIR MORPHOLOGY

PROPERTIES. 8th TEXTEH INTERNATIONAL CONFERENCE. Bucharest-Romania-2017.

- Beykhhormizi, Abdollah; Sarghein, Siavash Hosseini; Sarafraz Ardakani, Mohammad Reza; Moshtaghioun, Seyed Mohammad; Mousavi Kouhi, Seyed Mousa; Effect of Vermicompost Extract on Early Growth of Some Fennel Landraces under Salinity. 5th national conference of Iranian society of plant physiology. Zanjan-Iran-2017.
- Tohidinia, Maryam; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Sefid, Fatemeh; Evaluation of topology of CarO protein in *Acinetobacter baumannii*. The 2nd International and 10th National Iranian Biotechnology Congress. Tehran (Karaj)-Iran-2017.
- Faezi, Elahe; Moshtaghioun, Seyed Mohammad; Masoudi, Raheleh; Sarafraz, Mohammad Reza; Ranjbaran, Laleh; The Effect of Thymoquinon on *Twist1a* mRNA in Glioblastoma. West Asia Cancer Conference. Tehran-Iran-2017.
- Dehghan-Manshadi, Najmeh; Hadizadeh, Mohsen; Fattahi, Saeed; Moshtaghioun, Seyed Mohammad; Aflatoonian, Behrouz; Nikukar, Habib; Preliminary Study of Electrospun Polyurethane/Silk Nanofibers for Urogenital Tract Tissue Engineering Applications. The Second Nanomedicine and Nanosafety Conference (NMNS 2017). Tehran-Iran-2017.
- Majidzadeh, Maryam; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Genetic Variations of *CHRNA5* Gene Correlated to High Risk of Lung Cancer in Iranian Patients. The 2nd International Personalized Medicine Congress of Iran. Tehran-Iran-2018.
- Dehghan-Manshadi, Najmeh; Hadizadeh, Mohsen; Fattahi, Saeed; Nikukar, Habib; Moshtaghioun, Seyed Mohammad; Javaheri, Atiyeh; Development of polyurethane/silk fibroin electrospun nanofibers for neovagina tissue engineering. The first international Iranian tissue engineering and regenerative medicine congress. Tehran-Iran-2018.
- Benvidi, Ali; Banaei, Maryam; Yazdanparast, Samira; Moshtaghioun, Seyed Mohammad; Ghodrati Shatoori, Ehsan; Fabrication of a sandwich type biosensor for detection of human cancer cells by MWCNTs-Poly histidine. ISER - 426th International Conference on Chemical and Environmental Science -ICCES2018. Milan-Italy-2018.
- Dehghan-Manshadi, Najmeh; Fattahi, Saeid; Hadizadeh, Mohsen; Nikukar, Habib; Moshtaghioun, Seyed Mohammad; Evaluation of the Biocompatibility of Electrospun Silk Fibroin/Elastomeric Polyurethane Hybrid Scaffolds. 11th National Textile Engineering Conference. Guilan-Iran-2018.

- Behnooye, B.; Lotfi, S.; Moshtaghioun, S. M.; Mortazavi, M.; Falahati, A.; Study of a surface antigenic protein of *acinetobacter baumannii*, ABAYE2132, by bioinformatics approaches. The 15th Iranian national congress of biochemistry and 6th International congress of biochemistry and molecular biology. Isfahan-Iran-**2018**.
- Peyravi, Farzad; Latif, Alimohammad; Moshtaghioun, Seyed Mohammad; Protein tertiary structure prediction using Genetic Algorithm and lattice. 4th International Conference on New Studies of Computer and IT. Mashhad-Iran-**2018**.
- Benvidi, Ali; Banaei, Maryam; Yazdanparast, Samira; Moshtaghioun, Seyed Mohammad; Ghodrati Shatoori, Ehsan; Design and fabrication of a sandwich type biosensor using modified glassy carbon electrode for detection of human cancer cells by MWCNTs-Poly histidine as a platform and signal amplification label. International Conference on Medical Biological and Pharmaceutical Sciences. Budapest-Hungary-**2018**.
- Mojodi, E.; Moshtaghioun, SM.; Ghasemi, N.; Falahati, A.; Identification of a novel mutation in *MT-TY* gene in patients with idiopathic recurrent miscarriage. The 3rd international and 11th national biotechnology congress of Islamic republic of Iran. Tehran-Iran-**2019**.
- Keshavarz, S.; Moshtaghioun, SM.; Eftekhari, M.; Farashahi Yazd, E.; Mirmohammadi, R.; Mohammadi, M.; Akyash, F.; Aflatoonian, B.; Lipid Desaturation in Normal Human Ovarian Surface Epithelium Cell Cultures. 15th Congress on Stem Cell Biology and Technology. Tehran-Iran-**2019**.
- Iranmanesh, Mohammad; Moshtaghioun, Seyed Mohammad; Miresmaeili, Seyed Mohsen; The effect of non-functional SNPs associated with *CDHI-160C/A* on the expression of *CDHI* gene in breast cancer. The 3rd international and 11th national biotechnology congress of Islamic republic of Iran. Tehran-Iran-**2019**.
- Behnooye, B.; Lotfi, S.; Moshtaghioun, S. M.; Mortazavi, M.; Falahati, A.; Cloning and Expression of Antigenic ABAYE2132 Protein of *Acinetobacter baumannii* in *E. coli*. The 4th Conference on Protein and Peptide Sciences. Isfahan-Iran-**2019**.
- Mojodi, E.; Moshtaghioun, SM.; Ghasemi, N.; Falahati, A.; Identification of a novel mutation in *MT-TY* gene in patients with idiopathic recurrent miscarriage. 8th Yazd International Congress and Student Award in Reproductive Medicine and 3^{re} congress of reproductive genetics. Yazd-Iran-**2019**.
- Keshavarz, S.; Moshtaghioun, SM.; Eftekhari, M.; Farashahi Yazd, E.; Akyash, F.; Aflatoonian, B.; An investigation of the cell stemness of the human ovarian derived epithelial-like cells. 8th Yazd International Congress and Student Award in Reproductive Medicine and 3^{re} congress of reproductive genetics. Yazd-Iran-**2019**.

- Beykhhormizi, Abdollah; Sarghein, Siavash Hosseini; Sarafranz Ardakani, Mohammad Reza; Moshtaghioun, Seyed Mohammad; Mousavi Kouhi, Seyed Mousa; Interaction of worm-produced fertilizer and osmotic stress on the plant growth, membrane stability and antioxidant compounds of fennel (*Foeniculum vulgare Mill*). 6th Iranian Conference of Plant Physiology. Yazd-Iran-**2019**.
- Peyravi, Farzad; Latif, Alimohammad; Moshtaghioun, Seyed Mohammad; Protein tertiary structure prediction based on hidden Markov model. Second National Conference on Computer, Information Technology and AI Applications. Ahvaz-Iran-**2019**.
- Dehghan-Manshadi, Najmeh; Fattahi, Saeid; Hadizadeh, Mohsen; Nikukar, Habib; Moshtaghioun, Seyed Mohammad; Javaheri, Atiyeh; Aflatoonian, Behrouz; Composite PU/SF Hybrid Tubular Scaffolds for Fabrication of Engineered Neovagina *In vivo* Explants in a 3D-Culture Perfusion Bioreactor. 8th Yazd International Congress and Student Award in Reproductive Medicine and 3rd congress of reproductive genetics. Yazd-Iran-**2019**.

PUBLICATIONS

- Moshtaghioun, Seyed Mohammad; Haghbeen, Kamahldin; Lotfi Sahebghadam, Abbas; Legge, Raymond L; Khoshneviszadeh, Rabea; Farhadi, Sahar; Direct spectrophotometric assay of laccase using diazo derivatives of guaiacol. Analytical chemistry, **2011**, 83, 11, 4200-4205.
- Benvidi A., Dehghani Firouzabadi A., Moshtaghioun S. M., Mazloun-Ardakani M., Dehghan Tezerjani M., Ultrasensitive DNA sensor based on gold nanoparticles/reduced graphene oxide/glassy carbon electrode. Analytical biochemistry, **2015**, 484, 24-30.
- Benvidi A., Dehghani Firouzabadi A., Dehghan Tezerjani M., Moshtaghioun S. M., Mazloun-Ardakani M., Ansarin A., A highly sensitive and selective electrochemical DNA biosensor to diagnose breast cancer. Journal of Electroanalytical Chemistry, **2015**, 750, 57-64.
- Benvidi, Ali; Firouzabadi, Afsaneh Dehghani; Moshtaghioun, Seyed Mohammad; Mazloun-Ardakani, Mohammad; Tezerjani, Marzieh Dehghan; Ultrasensitive DNA sensor based on gold nanoparticles/reduced graphene oxide/glassy carbon electrode. Analytical biochemistry, **2015**, 484, 24-30.
- Benvidi, Ali; Tezerjani, Marzieh Dehghan; Moshtaghioun, Seyed Mohammad; Mazloun-Ardakani, Mohammad; An aptasensor for tetracycline using a glassy carbon modified with nanosheets of graphene oxide. Microchimica Acta, **2016**, 183, 5, 1797-1804.

- Miresmaeili, SM; Kordi, DM; Kalantar, SM; Moshtaghioun, SM; Haplotype Analysis of *BRCA1* Gene D17S855 and D17S1322 Markers in Iranian Familial Breast Cancer Patients. Asian Pacific journal of cancer prevention: APJCP, **2016**, 17, 7, 3615.
- Miresmaeili, Seyed Mohsen; Tamandani, Dor Mohammad Kordi; Kalantar, Seyed Mehdi; Moshtaghioun, Seyed Mohammad; Haplotype analysis of BRCA1 intragenic markers in Iranian patients with familial breast and ovarian cancer. International Journal of Reproductive BioMedicine, **2016**, 14, 4, 271.
- Benvidi, Ali; Tezerjani, Marzieh Dehghan; Jahanbani, Shahriar; Ardakani, Mohammad Mazloun; Moshtaghioun, Seyed Mohammad; Comparison of impedimetric detection of DNA hybridization on the various biosensors based on modified glassy carbon electrodes with PANHS and nanomaterials of RGO and MWCNTs, Talanta, **2016**, 147, 621-627.
- Benvidi, Ali; Tezerjani, Marzieh Dehghan; Firouzabadi, Afsaneh Dehghani; Mazloun-Ardakani, Mohammad; Moshtaghioun, Seyed Mohammad; Application of graphene oxide nanosheets as probe oligonucleotide immobilization platform for DNA sensing. Journal of the Iranian Chemical Society, **2016**, 13, 11, 2135-2142.
- Tezerjani, Marzieh Dehghan; Benvidi, Ali; Rezaeinasab, Masoud; Jahanbani, Shahriar; Moshtaghioun, Seyed Mohammad; Youssefi, Mostafa; Zarrini, Kamran; An impedimetric biosensor based on a composite of graphene nanosheets and polyaniline as a suitable platform for prostate cancer sensing. Analytical methods, **2016**, 8, 41, 7507-7515.
- Tezerjani, Marzieh Dehghan; Benvidi, Ali; Jahanbani, Shahriar; Moshtaghioun, Seyed Mohammad; Mazloun-Ardakani, Mohammad; A comparative investigation for prostate cancer detection using two electrochemical biosensors based on various nanomaterials and the linker of thioglycolic acid. Journal of Electroanalytical Chemistry, **2016**, 778, 23-31.
- Moshtaghioun, Seyed Mohammad; Dadkhah, Maryam; Bahremandjo, Kamran; Haghbeen, Kamahldin; Aminzadeh, Saeed; Legge, Raymond L; Optimization of simultaneous production of tyrosinase and laccase by *Neurospora crassa*. Biocatalysis and Biotransformation, **2017**, 35, 1, 1-10.
- Mehrabi, Nahid; Moshtaghioun, Seyed Mohammad; Neamatzadeh, Hossein; Novel mutations of the *CHRNA3* gene in non-small cell lung cancer in an Iranian population. Asian Pacific journal of cancer prevention: APJCP, **2017**, 18, 1, 253.
- Aghaei, Roghayyeh; Mazloun-Ardakani, Mohammad; Abdollahi-Alibeik, Mohammad; Moshtaghioun, Seyed Mohammad; Rezaeipoor-Anari, Ali; Haghighijoo, Zahra; Zamani, Leila; A new electrochemical biosensor based on telomeric G-

quadruplex DNA: In silico and experimental study of dihydropyridine derivatives potential effect on telomerase inhibition. *Journal of Electroanalytical Chemistry*, **2017**, 796, 24-32.

- Faraji, Reza; Behjati-Ardakani, Mostafa; Moshtaghioun, Seyed Mohammad; Kalantar, Seyed Mehdi; Namayandeh, Seyedeh Mahdieh; Soltani, Mohammad Hossien; Zandi, Hengameh; Firoozabadi, Ali Dehghani; Banizi, Neda Tavakkoli; Kahtooie, Foroozandeh Qasemi; "Evaluation of epidemiological, clinical, and microbiological features of definite infective endocarditis". *GMS hygiene and infection control*, **2017**, 12.
- Ansarin, Atefeh; Moshtaghioun, Seyed Mohammad; Sharifi, Akbar; Risk of Lung Cancer and Genetic Variations of *TERT* and *CLPTMIL* Genes: A Case-Control Study in an Iranian Population. *INTERNATIONAL JOURNAL OF HUMAN GENETICS*, **2018**, 18, 1, 13-21.
- Ahmadi, Mahboobeh; Moshtaghioun, Seyed Mohammad; Falahati, Ali; Association of the *CHRNA3 rs1051730* single nucleotide polymorphism with lung cancer risk in Iranian patients. *SSU Journal*, **2018**, 26, 7, 599-606.
- Faraji, Reza; Behjati-Ardakani, Mostafa; Moshtaghioun, Seyed Mohammad; Kalantar, Seyed Mehdi; Namayandeh, Seyedeh Mahdieh; Soltani, Mohammad Hossien; Emami, Mahmood; Zandi, Hengameh; Firoozabadi, Ali Dehghani; Kazeminasab, Mahmood; The diagnosis of microorganism involved in infective endocarditis (IE) by polymerase chain reaction (PCR) and real-time PCR: A systematic review. *The Kaohsiung journal of medical sciences*, **2018**, 34, 2, 71-78.
- Mazloum-Ardakani, Mohammad; Barazesh, Behnaz; Khoshroo, Alireza; Moshtaghioun, Mohammad; Sheikhha, Mohammad Hasan; "A new composite consisting of electrosynthesized conducting polymers, graphene sheets and biosynthesized gold nanoparticles for biosensing acute lymphoblastic leukemia". *Bioelectrochemistry*, **2018**, 121, 38-45.
- Faraji, Reza; Behjati-Ardakani, Mostafa; Faraji, Nooshin; Moshtaghioun, Seyed Mohammad; Kalantar, Seyed Mehdi; Pedarzadeh, Ali; Zandi, Hengameh; Sarebanhassanabadi, Mohammadtaghi; Ahmadi, Nastaran; Firoozabadi, Ali Dehghani; Molecular diagnosis of bacterial definite infective endocarditis by real-time polymerase chain reaction. *Cardiology research*, **2018**, 9, 2, 99.
- Beykkhormizi, Abdollah; Sarghein, Siavash Hosseini; Sarafraz Ardakani, Mohammad Reza; Moshtaghioun, Seyed Mohammad; Mousavi Kouhi, Seyed Mousa; Alleviation of Salinity Stress by Vermicompost Extract: A Comparative Study on Five Fennel Landraces. *Communications in Soil Science and Plant Analysis*, **2018**, 49, 17, 2123-2130.

- Bolok Yazdi, Hamid Reza; Sabbagh, Seyed Kazem; Mazaheri, Mahta; Salari, Mohammad; Moshtaghioun, Seyed Mohammad; Virus-induced gene silencing for functional analysis of *edsI* gene in tomato infected with *Ralstonia solanacearum*. *Zemdirbyste-Agriculture*, **2018**, 105, 4, 357–362.
- Mazloun-Ardakani, Mohammad; Tavakolian-Ardakani, Zahra; Sahraei, Nafiseh; Moshtaghioun, Seyed Mohammad; Fabrication of an ultrasensitive and selective electrochemical aptasensor to detect carcinoembryonic antigen by using a new nanocomposite. *Biosensors and Bioelectronics*, **2019**, 129, 1-6.
- Peyravi, Farzad; Latif, Alimohammad; Moshtaghioun, Seyed Mohammad; A composite approach to protein tertiary structure prediction: hidden Markov model based on lattice. *Bulletin of mathematical biology*, **2019**, 81, 3, 899-918.
- Peyravi, Farzad; Latif, Alimohammad; Moshtaghioun, Seyed Mohammad; Protein tertiary structure prediction using hidden Markov model based on lattice. *Journal of Bioinformatics and Computational Biology*, **2019**, 17, 02, 1950007.
- Peyravi, Farzad; Latif, Alimohammad; Moshtaghioun, Seyed Mohammad; Protein fold recognition model based on cubic lattice. *International Journal of Data Mining and Bioinformatics*, **2019**, 22, 1, 75-90.
- Mazloun-Ardakani, Mohammad; Barazesh, Behnaz; Moshtaghioun, Seyed Mohammad; A distinguished cancer-screening package containing a DNA sensor and an aptasensor for early and certain detection of acute lymphoblastic leukemia. *Clinica Chimica Acta*, **2019**, 497, 41-47.
- Akbarnia, Azam; Zare, Hamid R; Moshtaghioun, S Mohammad; Benvidi, Ali; Highly selective sensing and measurement of microRNA-541 based on its sequence-specific digestion by the restriction enzyme HinfI. *Colloids and Surfaces B: Biointerfaces*, **2019**, 182, 110360.
- Mazloun-Ardakani, Mohammad; Barazesh, Behnaz; Moshtaghioun, Seyed Mohammad; Sheikhha, Mohammad Hasan; "Designing and optimization of an electrochemical substitute for the MTT (3-(4, 5-Dimethylthiazol-2-yl)-2, 5-diphenyltetrazolium bromide) cell viability assay". *Scientific reports*, **2019**, 9, 1, 1-8.
- Dehghan-Manshadi, Najmeh; Fattahi, Saeid; Hadizadeh, Mohsen; Nikukar, Habib; Moshtaghioun, Seyed Mohammad; Aflatoonian, Behrouz; The influence of elastomeric polyurethane type and ratio on the physicochemical properties of electrospun polyurethane/silk fibroin hybrid nanofibers as potential scaffolds for soft and hard tissue engineering. *European Polymer Journal*, **2019**, 121, 109294.
- Mazloun-Ardakani, Mohammad; Barazesh, Behnaz; Moshtaghioun, Seyed Mohammad; "An aptasensor based on electrosynthesized conducting polymers,

Cu₂O–carbon dots and biosynthesized gold nanoparticles, for monitoring carcinoembryonic antigen". *Journal of Nanostructures*, **2019**, 9, 4, 659-668.

- Mazloun-Ardakani, Mohammad; Tavakolian-Ardakani, Zahra; Sahraei, Nafiseh; Moshtaghioun, Seyed Mohammad; Fabrication of an ultrasensitive and selective electrochemical aptasensor to detect carcinoembryonic antigen by using a new nanocomposite. *Biosens Bioelectron*, **2019**, 129, 1-6.
- Tohidinia, Maryam; Moshtaghioun, Seyed Mohammad; Sefid, Fatemeh; Falahati, Ali; Functional Exposed Amino Acids of CarO Analysis as a Potential Vaccine Candidate in *Acinetobacter Baumannii*. *International Journal of Peptide Research and Therapeutics*, **2020**, 1-13.
- Jafarnia, Maedeh Sadat; Saryazdi, Mehdi Khodadad; Moshtaghioun, Seyed Mohammad; Use of bacteria for repairing cracks and improving properties of concrete containing limestone powder and natural zeolite. *Construction and Building Materials*, **2020**, 242, 118059.
- Dehghan-Manshadi N, Hadizadeh M, Fattahi S, Moshtaghioun M, Nikukar H.; Development of polyurethane nanofibers scaffold for vaginal tissue engineering. *J Neyshabur Univ Med Sci.*, **2020**; 9 (1):28-41.
- Hamid Sodaeezade, Fariba Hokmollahi, Mohammad Mazloun, Mohammad Moshtaghioun, Manoochehr Mohammadi, Amirhossein Nateghi, Fatemeh Farbod, Zohre Seyed Nouri; Gold Bioaccumulation by Filamentous Soil Cyanobacteria Isolated From Mouteh Goldmine (Isfahan Province, Iran). *Journal of Phycological Research*, **2020**; 4 (1): 469-480.
- F Asadpour, M Mazloun-Ardakani, F Hoseynidokht, SM Moshtaghioun; In situ monitoring of gating approach on mesoporous silica nanoparticles thin-film generated by the EASA method for electrochemical detection of insulin. *Biosensors and Bioelectronics*, **2021**, 180, 113124.

REFERENCES

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