

Curriculum Vitae Fatemeh Tabandeh



Last updated: January 2020

	all	From 2015
citations	1140	643
H-index	18	14
i10-index	29	22

Personal Information

- **Fatemeh Tabandeh**, PhD in Chemical Engineering-Biotechnology
- **Title:** Associate Professor

***Bioprocess Engineering Group, Department of Industrial and Environmental Biotechnology, National Institute of Genetic Engineering and Biotechnology (NIGEB) Shahrak-e Pajoohesh, km 15, Tehran-Karaj Highway, Tehran, Iran
P.O. Box: 14965/161, Tehran, Iran***

- **Phone (work):** +98 21 44787301-10; +98 21 44787359 (direct)
Fax: +98 21 44787399
Email (work): taban_f@nigeb.ac.ir
Email (private): ftabandeh@yahoo.com
- **Date of Birth:** September 21, 1970
Place of Birth: Shiraz, Iran

Education

- **B.Sc. in Microbiology**, Isfahan University, Isfahan, Iran, 1989-1993. Thesis Title: "The stabilization of polyurethanes against biodegradation".
- **M.Sc. in Chemical Engineering-Biotechnology**, Tarbiat Modares University, Tehran, Iran, 1993-1997. Thesis Title: "Microbial production of poly-hydroxybutyrate (PHB) as a biodegradable polymer".
- **Ph.D. in Chemical Engineering-Biotechnology**, Tarbiat Modares University, Tehran, Iran, 1998-2004. Thesis Title: "Development in high-cell-density culture (HCDC) for temperature induced production of human growth hormone (hGH) by a recombinant *Escherichia coli*".

Previous Positions

- **Founding Member and CEO** of knowledge-based Mayazist Farayand Co., from 2014- onwards
- **Academic Member**, NIGEB, Tehran, Iran, from 2003- onwards
- **Head of Bioprocess Engineering Group**, NIGEB, from 2016-2018
- **Head of Bioprocess Lab**, NIGEB, Tehran, Iran, from 2012- onwards
- **Head of National Biotechnology Committee**, NIGEB, Tehran, Iran, from 2004-2008
- **Expert in Biomass Energy**, Renewable Energy Dept., New Energy Resources Organization, Tehran, Iran, from 1997-1999

Awards

- **Superior Technology** under the title “**Microbial Mulch**” selected by **Iran Fair of Research and Technology Achievement and Technomarket** - 2016
- **Top Professor** in NIGEB- 2014
- **Top Technologist** in NIGEB- 2013

Previous and Current Research Projects (at the Current Position)

1. Controlled Field Performance for Evaluation of Microbial Stabilizer for Soil Stabilization – (Project No. funded by Plan and Budget Organization & Vice-Presidency for Science and Technology)- **Supervisor** – (2020-2021)
2. Microbial production of hyaluronic acid-(Project No. 588)- **Supervisor** – (2018-2019)
3. Development Of Fermentation Process For Hyaluronic Acid Production By Recombinant *Corynebacterium glutamicum*- (Project No. 643)- **Supervisor**- (2017-2018)
4. Increasing Of Hyaluronic Acid Production Of *Lactobacillus acidophilus* ATCC 4356 Via Metabolic Engineering And Optimization of Culture Condition -(Project No. 642)- – **Advisor**- (2017-2018)
5. Biological Soil Stabilization for Haze Pollution Control: pilot scale study – (Project No. 103 funded by NIGEB)- **Supervisor** – (2016-2018)
6. Optimization of growth medium and physicochemical parameters for microbial production of hyaluronic acid- (Project No. 588) – **Supervisor** –(2016-2018)
7. Design and synthesis of codon optimized human interferon beta gene for expression in CHO cells (project No. 528)- **Supervisor** – (2015-2017)
8. Immobilization of whole-cell biocatalyst of intracellular lipase used in transesterification reaction (project No. 429) - **Supervisor** – (2012-2014)
9. Retinal stem cell culture on nanofibers, gene expression analysis and following up visual acuity improvement in animal models with macular degeneration (project No.1112 funded by a grant of Stem Cell Development Council- Project No. 417)- **Supervisor**- (2011-2014)
10. Optimization of 3D-culture of stem cells and transgenic CHO cell line in bioreactor system to be used for production of recombinant proteins (project No. 364) - **Advisor**- (2009-2011)
11. Isolation, identification, selection and application of *Lactobacilli* as a source of probiotics in broilers nutrition (granted by INSF-cooperated with Tehran University) - **Advisor**- (2008-2010)
12. Optimization of fermentation parameters for production of recombinant Interferon- β in pilot scale (Project No. 204) - **Advisor**- (2006-2008)
13. Production of an alkaline protease from *Bacillus clausii* for detergent industry in fed-batch fermentation (Project No. 226) - **Advisor**- (2004-2008)
14. Expression profiling of the fungus *Phanerochaete chrysosporium* RP78 for the effective biodegradation of azo dyes in textile effluents (Project No. 246) - **Supervisor**- (2006-2007)

15. Isolation and identification of a suitable native amyolytic bacterial strain (Project No. 246) - **Advisor-** (2009-2010)
16. Isolation and identification of bagasse degrading microorganisms and investigation of their ability for bioremediation of aromatic hydrocarbon contaminated soils (Project No. 266) - **Supervisor-** (2006-2007)
17. Separation and purification of nanoparticle bioproducts using aqueous two phase system (ATPS)- (Project No. 277) - **Supervisor-** (2005-2006)
18. Biodegradation of azo dyes by fungus *Phanerochaete chrysosporium* and determination of metabolic pathway of biodegradation of an azo dye and toxicity of dye or intermediate substances on the environment (Project No. 329) - **Supervisor-** (2008-2010)
19. Decolorization of azo-dyes by the immobilized fungus *Phanerochaete chrysosporium* RP78 (Project No. 304) - **Supervisor-** (2008-2009)

Teaching Experience

- Supervision Duties

1. **Ph.D course – supervisor to Almasi (2020-...), NIGEB**
2. **Ph.D course – supervisor to Alizadeh (2020-...), NIGEB, IAU**
3. **MSc course - Supervisor to Khodadadi (2019-...), NIGEB**
4. **Ph.D course – supervisor to Chehreara (2019-...), NIGEB, IAU**
5. **Ph.D course – supervisor to Maleka (2019-...), NIGEB, IAU**
6. **MSc course - Supervisor to Mohtaj (2018-...), NIGEB**
7. **MSc course - Supervisor to Vahedi (2018-...), NIGEB**
8. **Ph.D course – supervisor to Alahyari (2017-2020), NIGEB, Tehran U**
9. **MSc course - Supervisor to S. Khalaj (2017-2019), NIGEB**
10. **MSc course - Supervisor to Z. Nekouian (2017-2019), NIGEB**
11. **MSc course - Supervisor to Habibi (2017-2018), NIGEB**
12. **MSc course - Supervisor to Y. Jafari (2016-2018), NIGEB**
13. **MSc course - Supervisor to K. Fotuhi (2016-2017), NIGEB, Zanjan U**
14. **MSc course - Supervisor to P. Ataollahi (2016-2017), NIGEB, IAU**
15. **MSc course - Advisor to A. Karaminejad (2016-2017), NIGEB, IAU**
16. **MSc course - Supervisor to D. Ahmadi (2015-2017), NIGEB**
17. **MSc course - Supervisor to K. Farahmandi (2015-2016), NIGEB**
18. **MSc course - Supervisor to N. Khalili (2015-2016), NIGEB, IAU**
19. **MSc course - Supervisor to N. Eshaghi (2014-2016), NIGEB**
20. **MSc course - Supervisor to S. Karimian (2014-2016), NIGEB**
21. **MSc course - Supervisor to N. Rezakhani (2014-2016), NIGEB & Shahrekord U**
22. **MSc course - Supervisor to N. Shahmoradi (2015-2016), NIGEB & Tehran U**
23. **MSc course - Supervisor to M. Fallah (2015-2016), NIGEB**
24. **MSc course - Advisor to M. Samadi (2015-2016), NIGEB**
25. **PhD course - Supervisor to H. Moosazadeh (2013-2018), NIGEB & IAU**
26. **MSc course - Advisor to M. Babapour (2014-2015), NIGEB, Tehran U**
27. **MSc course - Supervisor to R. Beheshti (2014-2015), IAU**
28. **MSc course - Supervisor to N. Foroutan (2013-2014), NIGEB**
29. **MSc course - Supervisor to B. Maleki (2013-2015), NIGEB**
30. **MSc course - Supervisor to M. Shayesteh (2013-2015), NIGEB.**
31. **PhD course - Supervisor to M. Samudi (2011-2015), NIGEB.**
32. **PhD course - Supervisor to A. Ghadi (2011-2014), NIGEB & Mazandaran U.**
33. **MSc course - Supervisor to R. Shafiee (2012-2013), NIGEB & Tehran U.**
34. **MSc course - Supervisor to B. Nourani (2012-2013), NIGEB, Tehran U.**
35. **MSc course - Supervisor to B. Rahmani (2012-2013), NIGEB, Tehran U.**
36. **MSc course - Advisor to B. Behroozi (2011-2013), NIGEB**
37. **MSc course - Advisor to E. Aryapour (2011-2012), NIGEB & IAU.**
38. **MSc course - Advisor to E. Babaie (2011-2012), NIGEB & IAU.**

39. **MSc course - Supervisor to M.A. Taheri (2010-2012)**, NIGEB & IAU.
40. **MSc course - Advisor to N. Goudarzi (2010-2011)**, NIGEB & Isfahan U.
41. **MSc course - Advisor to M. Kalantari (2010-2011)**, NIGEB & Sharif U.
42. **MSc course - Supervisor to Z. Forghanipour (2010-2011)**, NIGEB & Tehran U.
43. **MSc course - Supervisor to R. Nourmohammadi (2010-2011)**, NIGEB & IAU.
44. **MSc course - Supervisor to S.A. Hashemizadeh (2010-2011)**, NIGEB & Tehran U.
45. **MSc course - Supervisor to H. Badiie (2010-2011)**, NIGEB & IAU.
46. **MSc course - Supervisor to M. Moradi (2009-2010)**, NIGEB & Payam Nour U.
47. **MSc course - Supervisor to F. Amjad Z. (2009-2010)**, NIGEB & Payam Nour U.
48. **PhD course - Supervisor to M. Sharifzadeh (2008-2011)**, NIGEB & Mazandaran U.
49. **PhD course - Advisor to N. Enayatizamir (2007-2010)**, NIGEB & Tehran U.
50. **MSc course - Supervisor to S. R. Mahdavi (2008-2009)**, NIGEB & IAU.
51. **MSc course - Supervisor to M. Shakibaie (2008-2009)**, NIGEB & Sahand UTech.
52. **MSc course - Supervisor to M. Zahmatkesh (2008-2009)**, NIGEB & Sahand UTech.
53. **PhD course - Supervisor to H. Taheri (2007-2009)**, NIGEB & Tehran U.
54. **MSc course - Advisor to M. Miri (2008-2009)**, NIGEB & IAU.
55. **MSc course - Supervisor to S. Ghorbani (2008-2009)**, NIGEB & Tehran U.
56. **MSc course - Advisor to M. Aghaiepour (2006-2007)**, NIGEB & Khatam U.
57. **MSc course - Supervisor to M. Molaie (2006-2007)**, NIGEB & Chamran U.
58. **MSc course - Supervisor to H.R. Hosseinian (2005-2006)**, NIGEB & Ferdowsi U.
59. **MSc course- Advisor to F. Ghaemi Oskouie (2003-2004)**. NIGEB, Sh-Beheshti U.

- **Courses**

Course title;

- **Biochemistry** and **Microbiology** to MSc students, 1999-2000, Tarbiat Modares University.
- **Applied Biotechnology** to PhD students, 2004, NIGEB.
- **Enzyme Technology** to PhD students, 2005, and MSc students, 2012, NIGEB
- **Biochemical Engineering** to PhD students, 2006, University of Mazandaran; to MSc students, 2015, NIGEB.
- **Statistics and Design of Experiments (DOE)** to PhD students, every semester from 2008 to 2015, Tarbiat Modares University; to MSc students, yearly from 2014-Now, NIGEB.
- **Industrial Biotechnology** to MSc students, yearly from 2012 to Now, NIGEB
- **Fermentation Processes in Biotechnology** to MSc students, yearly from 2013-Now, NIGEB

Book/Book Chapter

- Fatemeh Tabandeh (2019). **Principles of Statistical Design of Experiments**, ISBN: 2500110066579, Naghshe- Negar Co. (PERSIAN)
- Fatemeh Tabandeh, Parvin Shariati and Mahvash Khodabandeh (2012). **Application of Two-Dimensional Gel Electrophoresis to Microbial Systems**, Gel Electrophoresis - Principles and Basics, Dr. Sameh Magdeldin (Ed.), ISBN: 978-953-51-0458-2, InTech, Available from: <http://www.intechopen.com/books/gel-electrophoresis-principles-and-basics/application-of-two-dimensional-gel-electrophoresis-to-microbial-systems>
(this chapter has been downloaded more than 6000 times so far)
(This has been cited by 5)

Journal Publications

1. Tabasi, A., Tabandeh, F., Maghsoudi, A. **Hyaluronic acid production by recombinant *Corynebacterium glutamicum* AB1 in fed-batch fermentation**, *Biochemical Engineering Journal*, (2020), in preparation
2. Khalaj S., Tabandeh, F., Naseri H.R., **Evaluation of MICP by *Staphylococcus warneri* IR-103 for dust control application**, *Bioresource Technology*, (IF 2018= 6.669), in preparation
3. Samadi, M., Khodabandeh, M., Tabandeh, F., **Enhanced hyaluronic acid production in *Streptococcus zooepidemicus* by an optimized culture medium containing hyaluronidase inhibitor**, *Journal of Carbohydrate Chemistry*, (2020), submitted
4. Samadi, M., Tabandeh, F., Khodabandeh, M., Aminzadeh, S. **Optimization of hyaluronic acid by *Streptococcus zooepidemicus* ATCC 43070 by response surface methodology**, *Modares Journal of Biotechnology*, (2020), under revision (in PERSIAN)
5. Farahmandi, K., Rajab, S., Tabandeh, F., Khodabandeh, M., Maghsoudi, A., Ashengroph, M. **Efficient spray-drying of *Lactobacillus rhamnosus* PTCC 1637 with the purpose of total yield enhancement**, *Food Bioscience*, (2020), under revision. (IF 2019= 3.22)
6. Tavakoli, Z., Yazdian, F., Tabandeh, F., Sheikhpour, M. **Regenerative medicine as a novel strategy for AMD treatment: a review**, *Biomedical Physics & Engineering Express*, (2019), 6, 012001. (IF 2018= 1.1)
7. Badiee, H., Sabermahani, M., Tabandeh, F., Saeedi, A., **Application of an indigenous bacterium in comparison with *Sporosarcina pasteurii* for improvement of fine granular soil**, *International Journal of Environmental Science and Engineering*, (2019), doi.org/10.1007/s13762-019-02292-9. (IF 2019= 2.031)
8. Rajab, S., Tabandeh, F., Khodabandeh, M., Alahyaribeik, S. **The effect of *Lactobacillus* cell size on its probiotic characteristics**, *Anaerobe*, (2019), in press. (IF 2018= 2.704) <https://doi.org/10.1016/j.anaerobe.2019.102103>
9. Moosazadeh, R., Kalantari, F., Tabandeh, F., Ganjian, N. **Bio-cementation of loose sand using *Staphylococcus* sp. IR-103: A field study**, *Acta Geotechnica*, (2019), submitted (IF 2018= 2.43)
10. Fotuhi, F., Aminzadeh, S., Jafarian, V., Tabandeh, F. **Hyaluronic acid enhancement by genetic modification and RSM optimization**, *International Journal of Biological Macromolecules*, (2019), 121, 870-881 (IF 2018= 3.9) cited by 3
11. Fotuhi, F., Aminzadeh, S., Tabandeh, F., Jafarian, V. **Screening of HA-producing lactic acid bacteria and culture condition optimization of selected bacterium by Taguchi method**, *Molecular and cellular Biology*, 2019, 31 (4), 598-611 (in PERSIAN)
12. Babapour, F., Yazdian, F., Tabandeh F. **Simulation of Gelatin, Gelatin-chitosan and Poly-caprolactone Scaffolds in the Retina and Comparison of Pressure Gradient and Thickness Effect on Pressure Gradient**, *Modares Journal of Biotechnology* (2018) 9, 53-58 (in PERSIAN)

13. Moosazadeh, R., Tabandeh F., Kalantari, F., Yazdian, F. **Efficacy of Fe₃O₄/starch nanoparticles on *Sporosarcina pasteurii* performance in MICP process** Geomicrobiology Journal, (2018), in press. (IF 2016= 1.43) DOI: 0.1080/01490451.2018.1555295.
14. Moosazadeh, R., Tabandeh F., Kalantary, F., Ganjian, N., Fallah, F., Bagheri Lotfabad, T., Yazdian, F. **Mitigation of the liquefaction potential of soil Ca-carbonate Precipitation Induced by Indigenous Urease-producing *Staphylococcus sp. IR-103***, International Journal of Environmental Science and Engineering, (2018), (IF 2019= 2.031) DOI: 10.1007/s13762-018-1788-6 cited by 2
15. Tabandeh, F., Farahmandi, K. **Strain improvement for degradation of lignocellulosic compounds**; New Cellular and Molecular Biotechnology, (2018) 9 (33): 1-9. (in PERSIAN)URL: <http://ncmbjpiu.ir/article-1-1161-fa.html>
16. Shahmoradi, S, Yazdian, F., Janghorbani, A., Satarian, L., Behroozi, F., Tabandeh, F., Hagiralsadat, F., **A Novel application of Polycaprolactone Scaffolds and Human Embryonic Stem Cells (hESCs) toward AMD Treatment**; Artificial Cells, Nanomedicine and Biotechnology, (2018). Under review (IF 2017= 5.06)
17. Shakibaie, M., Tabandeh, F., Shariati, P., Nouruzy, A. **Synthesis a Thin-layer Gelatin Nanofiber Mat for Cultivating Retinal Cell**, Journal of Bioactive and compatible Polymers, (2018), 33 (4), 371-381. (IF 2017= 1.31) cited by 2
18. Tabandeh, F., Zahmatkesh, M., Farahmandi, K., **Biodegradation of wastewater containing industrial dyes; application of immobilized white rot fungi**, Journal of Studies in Color World; (2017), 7, 1-12. (in PERSIAN)
19. Tafakori, V, Zadmard, R., Tabandeh, F., Amoozgar, M.A., Ahmadian, G. **Equilibrium Isotherm, Kinetic Modeling, Optimization, and Characterization Studies of Cadmium Adsorption by Surface-Engineered *Escherichia coli***, Iranian Biomedical Journal, (2017), 21(6), 380-391. cited by 4
20. Fotuhi, F., Aminzadeh, S., Tabandeh, F., Jafarian, V. **Application of Hyaluronic acid in Medicine**, Laboratory Diagnostics, 2016, 129, 22-23 (in PERSIAN)
21. Nourani, B., Tabandeh, F., Yazdian, F., Soheili, Z., Shakibaie, M., Rahmani, S., **Thin natural gelatin/chitosan nanofibrous scaffolds for retinal pigment epithelium cells**, International Journal of Polymeric Materials and Polymeric Biomaterials, (2017), 1-10. (IF2017 =1.67) cited by 3
22. Foroutan, N, Tabandeh, F., Khodabandeh, M., Mojjani, N. **Isolation and Identification of an Indigenous Probiotic *Lactobacillus* Strain: Its Encapsulation with Natural Branched Polysaccharids to Improve Bacterial Viability**, Applied Food Biotechnology, (2017), 4 (3):133-142.
23. Maleki, B., Tabandeh, F., Soheili, Z., Morshedi, D. **Application of proteinous nanofibrils to culture retinal pigmented epithelium cells: A versatile biomaterial**, Reactive and Functional Polymers; (2017), 115, 36-42. (IF2017 =3.5)
24. Rahmani, S., Tabandeh, F., Faghihi, S, Amouabediny, G, Shakibaie, M., Nourani, B., Yazdian, F., **Fabrication and Characterization of Poly(ϵ -caprolactone)/Gelatin Nanofibrous Scaffolds for Retinal Tissue Engineering**, International Journal of Polymeric Materials and Polymeric Biomaterials, (2017), 67, 27-35. (IF2017 =1.67) cited by 7

25. Shahmoradi, S., Yazdian, F., Tabandeh, F., Hatamian, A., Soheili, Z., Navaie, M. **Controlled surface morphology and hydrophilicity of polycaprolactone toward human retinal pigment epithelium cells**, Materials Science and Engineering C, (2016), 73, 300-309. (IF2015 = 3.42) cited by 11
26. Samoudi, M., Minuchehr, Z., Harcum, S., Tabandeh, F., Omid Yeganeh, N, Khodabandeh, M. **Rational design of novel hyper-glycosylated interferon- β analogs with improved aggregation state: experimental validation**, Protein Engineering, Design and Selection (PEDS), (2016), 30, 23-30, doi: 10.1093/protein/gzw058. (IF2015 = 2.364)
27. Shahmoradi, S., Yazdian, F., Tabandeh, F., Hatamian, A. **Investigation and optimization of effective parameters in fabrication of scaffolds with electrospinning for using in retina**, International Journal of Analytical, Pharmaceutical and Biomedical Sciences, (2015), 4(7), 114-120. cited by 1
28. Davaiefar, S., Shariati, P., Tabandeh, F., Yakhchali, B., **Isolation and identification of a new *Bacillus cereus* strain and characterization of its neopullulanase**, Applied Food Biotechnology, (2015), 2(2), 39-45. cited by 2
29. Samoudi, M., Tabandeh, F., Minuchehr, Z., Ahangari Cohan, R., Nouri Inanlou, D., Khodabandeh, M., Sabery Anvar, M., **Rational design of hyper-glycosylated interferon beta analogs: A computational strategy for glycoengineering**, Journal of Molecular Graphics and Modeling, (2015), 56, 31-42. (IF2013 = 2.02) cited by 13
30. Ghadi, A., Tabandeh, F., Mahjoub, S., Mohsenifar, A., Talebnia Roshan, F., Shafiee Alavijeh, R. **Fabrication and Characterization of Core-Shell Magnetic Chitosan Nanoparticles as a Novel carrier for Immobilization of *Borkhoderia cepacia* Lipase**; Journal of Oleo Science, (2015), 64 (4) 423-431. (IF2013 = 1.41) cited by 11
31. Shafiee Alavijeh, R., Tabandeh, F., Tavakoli, O., Karkhane, A., Shariati, P. **Enzymatic Production of Biodiesel from Microalgal Oil using Ethyl Acetate as an Acyl Acceptor**; Journal of Oleo Science, (2015), 64 (1) 69-74. (IF2013 = 1.41) cited by 7
32. Ghadi, A., Mahjoub, S., Tabandeh, F., Talebnia Roshan, F., **Synthesis and optimization of chitosan magnetic nanoparticles for biomedical engineering and pharmaceutical applications**; Caspian Journal of International Medicine, (2014), 5(3): 156-161. cited by 46
33. Goodarzi, N., Karkhane, A., Mirlohi, A., Tabandeh, F., Torktas, I., Aminzadeh, S., Yakhchali, B., Shamsara, M., Ghafouri, M. **Protein Engineering of *Bacillus thermocatenuatus* Lipase via Deletion of the $\alpha 5$ Helix**; Applied Biochemistry and Biotechnology, 179 (2014), 339-351. (IF2013 = 1.68) cited by 8
34. Moradi, M., Shariati, P., Tabandeh, F., Yakhchali, B., Bakhshi Khaniki, G.; **Screening and isolation of powerful amyolytic bacterial strains**; International Journal of Current Microbiology and Applied Sciences, 3(2) (2014), 758-768. (IF2011 = 1.53) cited by 14
35. Hashemizadeh, S.N., Tabandeh, F., Tavakoli, O., Karkhane, A.; **A comparative study of immobilized-whole cell and commercial lipase as a biocatalyst for biodiesel production from soybean oil**; International Journal of Current Microbiology and Applied Sciences, 3(2) (2014), 741-752. (IF2011 = 1.53) cited by 1

36. Noormohammadi, R., Tabandeh, F., Shariati, P., Otadi, M. **Characterization of a lipase from a newly isolated *Pseudomonas sp.***; Iranian Journal of Microbiology, 5 (2013), 422-427.
37. Ghane, M., Tabandeh, F., Bandehpour, M., Ghane, M., **Isolation and characterization of a heavy metal resistant *Comamonas sp.* from industrial effluents**; Iranian Journal of Science and Technology, (2013), A2:173-179.
38. Mohammadizadeh, M., Hamidi-Esfahani, Z., Abassi, S., Moradi, M., Tabandeh, F., **Isolation and identification of cellulolytic fungi from the soil and optimization of cellulolytic activities of *Aspergillus niger* MZM 89-a2**, Current Topics in Biotechnology, 7 (2012) 71-77.
39. Ariapour, E., Shariati, P., Tabandeh, F., Yakhchali, B., **Study the enzyme profile of *Bacillus amyloliquifaciens* BEH111 and characterization of α -amylase produced by this bacterium**, New Cellular and Molecular Biotechnology Journal, 2 (2012) 41-48. (in PERSIAN)
40. Shakibaie, M., Ghafari Rahbar, M., Tabandeh, F., Tavanai, H., Zomorodipour, A., Ebrahimi, S., Morshed, M., Ataei, F., **Development of PCL/PEG nanofibrous mats as alternative carriers for enhanced attachment and proliferation of recombinant Chinese hamster ovary cells**; Journal of Polymer Engineering, 6-7 (2012) 453-461. (IF2011 = 0.397)
41. Kalantary, M., Kazamini, M., Tabandeh, F., Arpanaie, A., **Lipase Immobilisation on Magnetic Silica Nanocomposite Particles: Effects of the Silica Structure on Properties of the Immobilised Enzyme**; Journal of Materials Chemistry, 22 (2012), 8385-8393. (IF2011 = 5.968) cited by 84
42. Shahravi, A., Tabandeh, F., Bambai, B., Zamanizadeh, H., Mizani, M., **Production of probiotic *Lactobacillus casei* ATCC 334 on date powder as alternative carbon source**; Chemical Industry and Chemical Engineering Quarterly, 18 (2012) 273-282. (IF2011 = 0.61) cited by 16
43. Shakibaie, M., Tabandeh, F., Ebrahimi, S., Zomorodipour, A., Mohammad-Beigi, H., Ataei, F., Habib-Ghomi, H., **Kinetics, experimental and simulation studies of Chinese hamster ovary cell growth in a packed-bed bioreactor**; World Applied Sciences 15 (2011) 1568-1575 cited by 5
44. Enayat zamir, N., Tabandeh, F., Rodríguez Couto, S., Yakhchali, B., Alikhani, H.A., Mohammadi, L., **Biodegradation pathway and detoxification of the diazo dye Reactive Black 5 by *Phanerochaete chrysosporium***; Bioresource Technology, 102 (2011) 10359-10362. (IF2011 = 4.98) cited by 54
45. Aghaiepoor, M., Mozafari, S., Khodabandeh, M., Tabandeh, F., Bambai, B., **High level of extracellular fermentation and alternative purification of *Escherichia coli* Asparaginase IIIB**, Biharean Biologist, 5 (2011) 96-101. cited by 8
46. Ghorbani, S., Tabandeh, F., Yakhchali, B., Mehrnia, M.R., **Immobilization of recombinant nanobiofiber CS3 fimbriae onto alginate beads for improvement of cadmium biosorption**; Biotechnology and Bioprocess Engineering, 16 (2011) 1019-1026. (IF2011 = 1.278) cited by 3
47. Shakibaie, M., Tabandeh, F., Zomorodipour, A., Ebrahimi, S., Ataei, F., **Improvement in rCHO cell density and heterologous protein production: effect of culture**

- condition;** Current Trends in Biotechnology and Pharmaceuticals, 5 (2011) 1298-1308.
48. Tabandeh, F., Hosseinian M, H.R., Yakhchali, B., Hamed Mousavian, M.T., Shariati, P., Ghasemi, F., **Fed-batch fermentation of *Bacillus clausii* for efficient production of alkaline protease using different feeding strategies;** Chemical Engineering Communications, 198 (2011) 1063. (IF2011 = 0.946) cited by 7
 49. Sharifzadeh, M., Najafpour, G.D., Younesi, H., Tabandeh, F., Eisazadeh, H., Khodabandeh, M., **Growth kinetic parameters and biosynthesis of PHA in *Cupriavidus necator* DSMZ 545 on selected substrates;** Chemical Industry and Chemical Engineering Quarterly, 17(2011) 1-8. (IF2011 = 0.61) cited by 22
 50. Zahmatkesh, M., Tabandeh, F., Ebrahimi, S., **Biodegradation of Reactive Orange 16 by *Phanerochaete chrysosporium* fungus; application in a fluidized bed bioreactor;** Iranian Journal of Environmental Health Science and Engineering, 7 (2010) 385-390. (IF2010 = 1.072) cited by 14
 51. Ghorbani, S., Tabandeh, F., Yakhchali, B., Mehrnia, M.R., **Heavy metals: environmental impacts and biological methods for their removal;** Iranian Journal of Chemical Engineering, 50 (2010) 100-111. (in PERSIAN)
 52. Taheri, H.R., Moraveg, M., Malakzadegan, A., Tabandeh, F., Zaghari, M., Shivazad, M., Adibmoradi, M., **Efficacy of *Pediococcus acidlactici*-based probiotic on intestinal coliforms and villus height, serum cholesterol level and performance of broiler chickens;** African Journal of Biotechnology, 9 (2010) 7564-7567. (IF2010 = 0.573) cited by 18
 53. Mahmoudi, M., Sharifzadeh Baei, M., Najafpour, G.D., Tabandeh, F., Eisazadeh, H., **Kinetic model for polyhydroxybutyrate (PHB) production by *Hydrogenophaga pseudoflava* and verification of growth conditions;** African Journal of Biotechnology, 9 (2010) 3151-3157. (IF2010 = 0.573) cited by 19
 54. Enayat zamir, K.H., Alikhani, H.A., Yakhchali, B., Tabandeh, F., Rodríguez Couto, S., **Decolouration of azo dyes by *Phanerochaete chrysosporium* immobilised into alginate beads;** Environmental Science and Pollution Research, 17 (2010) 145-153. (IF2010 = 2.87) cited by 55
 55. Miri, M., Bambai, B., Tabandeh, F., Panahi, F., Sadeghizadeh, M., **Recombinant expression of *Alcanivorax borkuamensis* SK2 Alkane hydroxylase (AlkB2);** Biotechnology Letters, 32 (2010) 497-502. (IF2010 = 1.768) cited by 10
 56. Sharifzadeh, M., Najafpour, G.D., Lasemi, Z., Tabandeh, F., Younesi, H., Eisazadeh, H., Khodabandeh, M., **Optimization PHAs production from dairy industry wastewater (cheese whey) by *Azohydromonas lata* DSMZ 1123;** Iranian Journal of Energy and Environment, 1 (2010) 132-136. cited by 1
 57. Ghasemi, F., Tabandeh, F., Rao, K.R.S.S., Bambai, B., **Decolorization of different azo dyes by *Phanerochaete chrysosporium* RP78 under optimal conditions;** International Journal of Environmental Science and Technology, 7 (2010) 457-464. (IF2010 = 3.157) cited by 14
 58. Taheri, H.R., Moraveg, M., Tabandeh, F., Zaghari, M., Shivazad, M., **Efficacy of combined or single use of *Lactobacillus crispatus* LT116 and *Lactobacillus johnsonii* LT171 on broilers performance;** British Poultry Science, 51 (2010) 580-585. (IF2010 = 1.03) cited by 18

59. Sharifzadeh, M., Tabandeh, F., Younesi, H., Najafpour, G.D., Eisazadeh, H., Khodabandeh, M., **Optimization PHAs production by *Cupriavidus necator* from molasses and acetate as substrate**; Journal of Iranian Chemical Society, 6 (2009) S101. (P-11-1064-1) (IF2010 = 1.5) cited by 6
60. Sharifzadeh, M., Tabandeh, F., Younesi, H., Najafpour, G.D., Eisazadeh, H., **Optimization PHAs production from cheese whey by *Azohydromonas lata***; New Biotechnology, 25 (2009) S268. (IF2010 =1.843)
61. Sharifzadeh, M., Najafpour, G.D., Younesi, H., Tabandeh, F., Eisazadeh, H., **Poly (3-hydroxybutyrate) synthesis by *Cupriavidus necator* DSMZ 545 utilizing various carbon sources**; World Applied Sciences Journal, 7 (2009) 157-161. cited by 27
62. Enayat zamir, K.H., Alikhani, H.A., Tabandeh, F., Yakhchali, B., Mohammadi, L., Rodríguez Couto, S., **Combined action of laccase and cellobiose dehydrogenase for the decolouration of the azo dye Ponceau Xylidine R**; New Biotechnology (2009) 25:152. (IF2010 =1.843)
63. Miri, M., Bambai, B., Tabandeh, F., Panahi, F., Sadeghizadeh, M., **The role of microorganisms in removal of marine petroleum contaminations**; Farayandno, 19 (2009) 60-74. (in PERSIAN)
64. Taheri, H.R., Tabandeh, F., Moraveg, M., Zaghari, M., Shivazad, M., Shariati, P., **Potential probiotic of *Lactobacillus johnsonii* in chicken nutrition**; African Journal of Biotechnology, 8 (2009) 5833-5837. cited by 28
65. Taheri, H.R, Tabandeh, F., Moraveg, M., Yakhchali, B., **Screening of lactic acid bacteria towards their selection as a source of chicken probiotic**; Journal of Poultry Science, 88 (2009) 1586-1593. cited by 114
66. Enayat zamir, K.G, Tabandeh, F., Yakhchali, B., Alikhani, H.A., Rodríguez Couto, S., **Assessment of the joint effect of laccase and cellobiose dehydrogenase on the decolouration of different synthetic dyes**; Journal of Hazardous Materials, 169 (2009) 176-181. (IF2010 =3.723) cited by 32
67. Tabandeh, F., Jahanshahi, M., Khodabandeh, M., Khavarpour, M., Danesh, H., **ATPS as an efficient method for separation of bionanoparticles: Investigation and optimization of partition behavior of pDNA**; Chemical and Biochemical Engineering Quarterly, 23 (2009) 351-357. cited by 7
68. Tabandeh, F., Roaiaee, M., Bambai, B., Molaie M., Ghasemi, F., **Isolation and identification of bagasse degrading fungi**; Iranian Journal of Biology (ISC Journal), 22 (2009) 442-452.
69. Tabandeh, F., Khodabandeh, M., Yakhchali, B., Habib-Ghomi, H., Shariati, P., **Response surface methodology for optimizing the induction conditions of recombinant interferon beta during high cell density culture**; Chemical Engineering Science, 63 (2008) 2477-2483. (IF2008 =1.88) cited by 32
70. Morabbi, K., Eftekhar, F., Yakhchali, B., Tabandeh, F., **Isolation and identification of a lipase producing *Bacillus* sp. from soil**; Pakistan Journal of Biological Sciences, 11 (2008) 740-745. cited by 49
71. Babaiepour, V., Shojaosadati, S.A., Khalilzadeh, R., Maghsoudi, N., Tabandeh, F., **A proposed feeding strategy for overproduction of recombinant proteins by *E.***

- coli*; Biotechnology and Applied Biochemistry, 49 (2008) 141-147. (IF2008 =1.29) cited by 43
72. Ghaemi Oskouie, S.F., Tabandeh F., Yakhchali, B., Eftekhar F., **Response surface optimization of medium composition for alkaline protease production by *Bacillus clausii***; Biochemical Engineering Journal, 39 (2008) 37-42. (IF2008 =1.9) cited by 115
73. Ghaemi Oskouie, S.F., Tabandeh F., Yakhchali, B., Eftekhar F., **Enhancement of alkaline protease production by *Bacillus clausii* using Taguchi experimental design**; African Journal of Biotechnology, 6 (2007) 2559-2564. cited by 36
74. Tabandeh, F., Shojaosadati, S.A., Khodabandeh, M., Sanati, M.H., Yakhchali, B., **Evaluation of heat induction strategy for recombinant human growth hormone expression in fed batch fermentation**; Iranian Journal of Biotechnology, 3 (2005) 24-30. cited by 3
75. Tabandeh, F., Yakhchali, B., Shojaosadati, S.A., Khodabandeh, M., Sanati, M.H., **Growth kinetics and hGH production of a heat-inducible recombinant *E. coli* during batch fermentation**; Iranian Journal of Science and Technology, 28 (2004) 11-17. (IF2005 =0.057) cited by 3
76. Tabandeh, F., Shojaosadati, S.A., Zomorodipour, A., Khodabandeh, M., Sanati, M.H., Yakhchali, B., **Heat-induced production of human growth hormone by high cell density cultivation of recombinant *Escherichia coli***; Biotechnology Letters, 26 (2004) 245-250. (IF2005 =1.108) cited by 66
77. Tabandeh, F., Vasheghani-Farahani, E., **Biosynthesis of PHB as a biodegradable polymer by *Ralstonia eutropha***; Iranian Polymer Journal, 12 (2003) 37-42. (IF2005 =0.316) cited by 28

Patents

1. Tabandeh, F., Bagheri, T., **Production process for microbial mulch**; 2017, Patent No. 93016.
2. Badie, H., Tabandeh, F. **Biological method for sand dune stabilization by calcium carbonate crystals**; 2017, Patent No. 92991.
3. Samoudi, M., Tabandeh, F., **Glycosylated analogs of human interferon-beta with less affinity to aggregation**; 2016, Patent No., 87524
4. Tabandeh, F., Khodabandeh, **Culture medium for stabilizing of lactic bacteria in freeze drying process**, September 24, 2013, Patent No: 80657
5. Tabandeh, F., Badie, H., **Biological cement**, July 5, 2012, Patent No: 75794
6. Tabandeh, F., Khodabandeh, M., Zamzamian, S., **Know-how to produce soluble starter cultures for making yoghurt**; 22 May 2011, Patent No: 70020
7. Tabandeh, F., Khodabandeh, M., Yakhchali, B., Habib Ghomi, H.; **Production process of beta-interferon using recombinant *E. coli***; 6 July 2008, Patent No: 50519

Standards

1. **Testing of Chemicals Toxicity -Acute Dermal Irritation/Corrosion**; 2018, Iran National Standard, 15568
2. **Assessment Guideline of Probiotic microorganisms in food**; 2017, Iran National Standard No: 22015
3. **Probiotics Microorganisms, Characteristics and assay**; 2014, Iran National Standard No: 19459
4. **Experimental method for determination of enzyme activity of alkaline protease**; 23 February 2008, Iran National Standard No: 9816

Conferences/Seminar/Congress Presentations

1. Mohtaj, P., Tabandeh, F., Khodabandeh, M, Khalaj, S. **Effect of temperature on molecular weight of hyaluronic acid produced by recombinant *Corynebacterium glutamicum***, The 12th International Congress of Chemical Engineering (ICHEC 2020), May 6-9, Guilan, Iran
2. Vahedi, N., Tabandeh, F., Mahmudifard, M. **Study on reduction of polydispersity of hyaluronic acid produced by recombinant *Corynebacterium glutamicum***, The 12th International Congress of Chemical Engineering (ICHEC 2020), May 6-9, Guilan, Iran
3. Fotuhi, F., Aminzadeh, S., Jafarian, V., Tabandeh, F., Khodabandeh, M., **HA-producing Non-recombinant GRAS Bacteria**, , The 2nd International and 10th National Biotechnology Congress, 2017, August 29-31, Karaj, Iran
4. Khalaj, S., Tabandeh, F., Bagheri, T, Kazemi, A., Naseri, H.R., **Influence of Different Carbone Sources on Growth Rate of Urease Producer *Staphylococcus sp. IR-103***, The 10th International Congress of Chemical Engineering (ICHEC 2018), May 6-9, Isfahan, Iran
5. Tabasi, M., Tabandeh, F., Maghsoudi, A. **Heterologous hyaluronic acid production in *Corynebacterium glutamicum* and medium optimization**, The 2nd International and 10th National Biotechnology Congress, 2017, August 29-31, Karaj, Iran
6. Jafari, Y., Tabandeh, F., Aminzadeh, S., Bagheri, T. **Study on urease localization produced by *Staphylococcus sp. IR-103* and its time profile of urease activity in various culture media**, The 2nd International and 10th National Biotechnology Congress, 2017, August 29-31, Karaj, Iran
7. Ataollahi, P., Tabandeh, F., Akhavan Sepahi, A. **Hyaluronic acid production by recombinant *Corynebacterium glutamicum* at different feeding and induction time**, The 2nd International and 10th National Congress of Biotechnology, 2017, Karaj, Iran
8. Moosazadeh, R., Tabandeh F., Kalantary F., **Study of effective factors on microbial soil improvement by UCS**, The 3rd National Conference of Environment and Natural Resources, Shiraz, Iran, February 2017
9. Tabandeh, F., Bagheri, T, Fallah, H., kazemi, A., **Effect of biocement formation by using *Sporocarcina pasteurii* PTCC 1645 on mitigation of soil liquefaction in saturated condition**, the 3rd International Conference of Environmental Engineering, Abadan, 2017

10. Tabandeh, F., Bagheri, T., Kazemi, A., Optimization of soil stabilization by Taguchi experimental design for dust control, the 1st Conference on Salt Lake, Qom, 24 February 2017
11. Eshaghi, N., Maghsoudi, A., Tabandeh, F., ***The ability investigation of some probiotic strains against Streptococcus. Mutans; The agent of dental caries***, The 3rd conference on Probiotics and Functional Foods, 2016
12. Karimian S., Tabandeh, F., Maghsoudi, A. ***Study on Extrusion method for microencapsulation of probiotic bacterium Lactobacillus casei applicable in food industry***, The 3rd conference on Probiotics and Functional Foods, 2016
13. Farahmandi, K., Tabandeh, F., Khodabandeh, M., Maghsoudi, A. ***Investigation on spray-drying method for microencapsulation of Lactobacillus rhamnosus***, The 3rd conference on Probiotics and Functional Foods, 2016
14. Ahmadi, D., Yazdian, F., Tabandeh, F. ***Investigation of microbial calcite precipitation***, The 16th International and Iranian Congress of Microbiology, August 2015, Iran
15. Ahmadi, D., Yazdian, F., Tabandeh, F. ***Investigation of microbial calcite precipitation***, The International Congress of Chemical Biotechnology, August 2015, Iran
16. Eshaghi, N., Maghsoudi, A., Tabandeh, F., Hemmati, M. ***Screening of probiotic bacteria based on biofilm formation on dental model***, The 16th International and Iranian Congress of Microbiology, August 2015, Iran
17. Samadi, M., Khodabandeh, M., Tabandeh, F., Khanboluki, A. ***A comparison of the accuracy of BMM and CTAB methods in measurement of hyaluronic acid levels***, The 16th International and Iranian Congress of Microbiology, August 2015, Iran
18. Fallah, H., Tabandeh, F., Bagheri, T., shayesteh, M. ***Comparison of growth and urease activity for Sporosarcina pasteurii and Staphylococcus pasteurii*** The 16th International and Iranian Congress of Microbiology, August 2015, Iran
19. Shahmoradi, S., Hatamian, A., Tabandeh, F., Yazdian, F., ***Investigation of Highly Increase of Hydrophilicity of PolyCaproLactone using Hydrolysis Process.***
20. Shahmoradi, S., Hatamian, A., Tabandeh, F., Yazdian, F., ***Polycaprolacton as a suitable scaffold for retina diseases: based on statistical analysis***, The 1st International and 9th National Biotechnology Congress, May 2015, Iran
21. Shahmoradi, S., Yazdian, F., Tabandeh, F., Hatamian, A., ***Investigation and optimization of effective parameters in fabrication of scaffolds with electrospinning for using in retina***, The 3rd National Seminar on the Role of Medical Basic Sciences on Health Promotion, Shahid Beheshti University
22. Samadi, M., Khodabandeh, M., Tabandeh, F., Khanboluki, A. ***Hyaluronic acid production by Streptococcus zooepidermicus ATCC 43079***, The 1st International and 9th National Biotechnology Congress, May 2015, Iran
23. Amjad, F., Tabandeh, F., Yakhchali, B. ***Production of alkaline protease by Bacillus clausii immobilized on baggase and polyurethane foam***, 1st International and 9th National Biotechnology Congress, May 2015, Iran
24. Karimian, S., Tabandeh, F., Maghsoudi, A. Viability of free and encapsulated lactobacilli during freeze drying process, 1st International and 9th National Biotechnology Congress, May 2015, Iran

25. Rezakhani, M., Tabandeh, F., Saffar, B., Samudi, M. **Construction of an efficient vector for expression of optimized human interferon-beta in CHO cells**, 1st International and 9th National Biotechnology Congress, May 2015, Iran
26. Eshaghi, N., Maghsudi, A., Tabandeh, F., Hemmati, M. **Screening of probiotic bacteria based on biofilm formation on dental model**, 1st International and 9th National Biotechnology Congress, May 2015, Iran
27. Beheshti, R., Tabandeh, F., Khodabandeh, M. **Investigation of viability of *Bifidobacterium lactis* during freeze drying process**, 15th International Congress of Chemical Engineering, 2015, Feb., Tehran, Iran
28. Ghadi, A., Mahjoub, S., Tabandeh, F., Mohsenifar, A. **Immobilization of *Pseudomonas cepacia* lipase on chitosan nanoparticles using glutaraldehyde by cross linking method**. 5th International Congress of Biochemistry and Molecular Biology, Yazd, Iran, 2013. Iranian Journal of Biotechnology 2013, 11(42), Suppl. 1, 189 [ISI].
29. Mahjoub, S., Ghadi, A., Tabandeh, F. **Synthesis and characterization of magnetic core-shell nanoparticles**. (ASME 2014, 3rd Global Congress on Nano Engineering for Medicine and Biology. 2014, San Francisco, California, USA.
30. Mahjoub, S., Ghadi, A., Tabandeh, F. **Immobilization of lipase on novel chitosan nanomagnetic particles for industrial and biomedical applications**. ASME 2013 2nd Global Congress on Nano Engineering for Medicine and Biology. 2013, Boston, Massachusetts, USA
31. Forutan, N., Tabandeh, F., Khodabandeh, M., Mojgani, N., Janfada, B., Moradi, M. **Identification and characterization of probiotic potential of an indigenous *Lactobacillus casei* for using in dairy industries**, The 18th National and 6th International Congress of Biology, 2014, Tehran, Iran
32. Forutan, N., F., Khodabandeh, Tabandeh, F., M., Mojgani, N., Maghsudi, A., Moradi, M. **Probiotic potential of *Lactobacillus casei* strain and its viability improvement by encapsulation**, The National Congress of Microbiology, 2014, Tehran, Iran
33. Shakibaie, M., Tabandeh, F., **Human retinal pigment epithelial cells proliferation on gelatin nanofibrous scaffold**, The 1st Middle East Controlled Release Conference (MECRC 2014) and The 6th Iranian Controlled Release Society Conference (ICRC 2014), February, 2014, Tehran, Iran
34. Shakibaie, M., Tabandeh, F. **Syudy on biocompatibility of electrospun gelatin nanofibrous scaffolds**, The 5th International Conference of Nanostructures (ICNS5), March, 2014, Kish Island, Iran
35. Shayesteh, M., Tabandeh, F., Yakhchali, B., Samoudi, M., Shakibaie, M., **Cloning and expression of codon optimized human interferon beta-1a gene in CHO cell line**, The 8th International Chemical engineering Congress and Exhibition (IChEC 2014), February, 2014, Kish Island, Iran
36. Shafiee, R, Tavakoli, O., Tabandeh, F., Karkhane, A., **Enzymatic transesterification of microalgal oil for biodiesel production in presence of different acyl acceptors**, The 8th International Chemical engineering Congress and Exhibition (IChEC 2014), February, 2014, Kish Island, Iran
37. Noorani, B., Tabandeh, F., Amuabediny, G., Shakibaie, M., Yazdian, F., **Nanofabrication of a gelatin-chitosan thin scaffold for retinal pigment epithelial cells**, TERMIS-EU:

Tissue Engineering and Regenerative Medicine World Conference, June, 2014, Genova, Italy

38. Rahmani, S., Tabandeh, F., Soheili, Z., Amuabediny, G., Shakibaie, M., Yazdian, F., Noorani, B., **Retinal regenerative therapy using polycaprolactone/Gelatin cell delivery scaffolds**, 4th Congress of Vision Research and Ophthalmology (IRAVO), February, Tehran, Iran
39. Noorani, B., Tabandeh, F., Soheili, Z., Amuabediny, G., Shakibaie, M., Yazdian, F., Rahmani, S., **Using novel nanofibrous gelatin-chitosan scaffolds fabricated by electrospinning for retinal pigment epithelial cell**, 4th Congress of Vision Research and Ophthalmology (IRAVO), February, Tehran, Iran
40. Shafiee, R., Tavakoli, O., Tabandeh, F., Karkhane, A., **Enzymatic transesterification of algal oil in presence of tert-butanol as solvent for biodiesel production**; 1st National Conference of Energy, October, 2013, Tehran, Iran
41. Kalantary, M., Arpanaie, A., Kazamini, M., Tabandeh, F., **Preparation, characterization and application of Fe₃O₄ clusters @nSiO₂@mSiO₂ nanoparticles for lipase immobilization**; The 7th International Chemical Engineering Congress and Exhibition, November, 2011, Kish Island, Iran
42. Kalantary, M., Arpanaie, A., Kazamini, M., Tabandeh, F., **Synthesis of Fe₃O₄ clusters @nSiO₂@mSiO₂ nanoparticles for biotechnological and medical applications**; The 7th National Biotechnology Congress of Iran, September, 2011, Tehran, Iran
43. Noormohammadi, R., Tabandeh, F., **Isolation and molecular identification of an indigenous lipase producer and determination of kinetic and thermodynamic parameters of the enzyme**; The 7th National Biotechnology Congress of Iran, September, 2011, Tehran, Iran
44. Goodarzi, N., Karkhane, A., Yamchi, A., Tabandeh, F., Farrokh, P., Ghafoori, M., Hosseini, M., **Analysis of the X5 domain deletion in Bacillus thermophilus lipase**; 1st International and 12th National Congress of Microbiology, May, 2011, Kermanshah, Iran
45. Noormohammadi, R., Tabandeh, F., Otadi, M., Shariati, P., **Purification and characterization of a lipase produced by an indigenous bacterium isolated from industrial zone**; 1st International and 12th National Congress of Microbiology, May, 2011, Kermanshah, Iran
46. Hashemizadeh, S.N., Tavakoli, O., Tabandeh, F., Karkhane, A., **A comparative study of immobilized-whole cell and commercial lipase as a biocatalyst for biodiesel production from soybean oil**; World Renewable Energy Conference (WREC2011), May, 2011, Linköping, Sweden
47. Badiie, H., Tabandeh, F., **Making Biological brick as a building Material**; Applied Microbiology, 2011, Spain
48. Forghanipour, Z., Tabandeh, F., Tavakoli, O., Yakhchali, B., **Selection of a suitable recombinant Pichia Pastoris mutant producing lipase as biocatalyst for biodiesel production**; 2nd National Conference of Applied Microbiology, February, 2011, Tehran, Iran
49. Hashemizadeh, S.N., Tabandeh, F., Tavakoli, O., Karkhane, A., **Enzymatic biodiesel production by Rhizopus oryzae whole-cell biocatalyst from soybean in solvent free system**; (2011), 2nd National Conference of Applied Microbiology, February, 2011, Tehran, Iran

50. Badiiee, H., Tabandeh, F., Kalantary, F., ***Application of Microbial Calcite Precipitation in Foundation Engineering***; 2nd National Conference of Applied Microbiology, February, 2011, Tehran, Iran
51. Moradi, M., Shariati, P., Tabandeh, F., Yakhchali, B., ***Comparison of α -amylase proteins from several amyolytic microbial strains***; The 3rd Iranian Congress of Bioinformatics, August, 2010, Tehran, Iran
52. Moradi, M., Aliakbari, F., Shariati, P., Tabandeh, F., ***Comparison of protein sequences and conserved regions in extracellular pullulanase enzymes from two different bacterial genera***; The 11th Genetic Congress, May 2010, Tehran, Iran
53. Amjad Zanjani, F., Tabandeh, F., Mirzaeezadeh, Z., Davaiefar, S., ***Investigation and partial characterization of alkaline protease produced by an indigenous Bacillus clausii***; The 11th Genetic Congress, May 2010, Tehran, Iran
54. Davaiefar, S., Shariati, P., Tabandeh, F., Yakhchali, B., Kargar, M., Mirzaeezadeh, Z., ***The study of a new thermophilic pullulanase producing bacteria isolated from Iran***; The 11th Genetic Congress, May 2010
55. Enayatizamir, N., Tabandeh, F., Yakhchali, B., ***A simple and efficient method for determination of the azo dye toxicity in soil by using Sinorhizobium meliloti***; Environmental Chemistry, May, 2010, Bandarabbas, Iran
56. Taheri, H.R., Moraveg, H., Tabandeh, F., Zaghari, M., Shivazad, M., ***Lactobacillus cryspatus as an effective probiotic candidate among Lactic acid bacteria for chickens***; The 60th Annual Meeting of the European Association for Animal Production (EAAP), August, 2009, Barcelona, Spain
57. Taheri, H.R., Moraveg, H., Tabandeh, F., Zaghari, M., Shivazad, M., ***Different enzymatic activities of 62 isolated lactic acid bacteria of chicken digestive tract***; The 15th National and 3rd International Conference of Biology, August, 2009, Tehran, Iran
58. Moradi, M., Shariati, P., Tabandeh, F., Mirzaeezadeh, Z., Yakhchali, B., ***Isolation and investigation of native amyolytic strains from Iranian industrial sites***; The 6th National Congress of Biotechnology, August, 2009, Tehran, Iran
59. Amjad, F., Tabandeh, F., Bakhshi Khaniki, G., Yakhchali, B., ***Simultaneous production of amylase and protease by immobilized and free cells of B. clausii and B. subtilis***; The 6th National Congress of Biotechnology, August, 2009, Tehran, Iran
60. Mahdavi, S.R., Tabandeh, F., Yakhchali, B., Taeb, M., ***Enhanced cellulase production by UV-mutated indigenous Aspergillus niger***; The 6th National Congress of Biotechnology, August, 2009, Tehran, Iran
61. Shakibaie, M., Tabandeh, F., Zomorodipour, A.R., Ebrahimi, S., Habib Ghomi, H., Ataie, F., ***Improvement of cell growth and viability in rCHO cells in serum-free medium***; The 6th National Congress of Biotechnology, August, 2009, Tehran, Iran
62. Zahmatkesh, M., Tabandeh, F., Ebrahimi, S., ***Towards an optimum spore immobilization for biodegradation of industrial dyes; application of Phanerochaete chrysosporium fungus and calcium alginate biogel***; The 6th National congress of Biotechnology, August, 2009, Tehran, Iran
63. Zahmatkesh, M., Tabandeh, F., Ebrahimi, S., ***Biodegradation of synthetic dyes by P.chrysosporium fungi; Application of a fluidized bed bioreactor***; The 1st

International Conference of Wastewater Treatment and Reuse, September, 2009, Tehran, Iran

64. Sharifzadeh, M., Tabandeh, F., Yunesi, H., Najafpour, G., Issazadeh, H., **Optimization PHAs production from dairy industry waste water (cheese whey) by *Cupriavidus necator***; The 1st International Conference of Wastewater Treatment and Reuse, September, 2009, Tehran, Iran
65. Rodríguez Couto, S., Tabandeh, F., Yakhchali, B., Enayat zamir, K.H., **Combined action of laccase and cellobiose dehydrogenase for the decolouration of the azo dye Ponceau Xyldine R**; The 14th European Congress on Biotechnology, September, 2009, Barcelona, Spain
66. Enayat zamir, K., Tabandeh, F., Yakhchali, B., Rodríguez Couto, S., **Decolouration of the diazo dye Reactive Black 5 by *Trametes pubescens* at laboratory reactor scale**; The 1st International Conference of Wastewater Treatment and Reuse, September, 2009, Tehran, Iran
67. Miri, S.M., Bambai, B., Tabandeh, F., **Cloning and co-expression of robrodoxin and robrodoxin reductase from *Alcanivorax borkuamensis***; The 2nd International Student Conference of biotechnology, November, 2008, Tehran, Iran
68. Shakibaie, M., Tabandeh, F., Zomorodipour, A.R., Ebrahimi, S., **Mitigation of ammonium stress on the growth of recombinant CHO cells**; The 2nd International Student Conference of biotechnology, November, 2008, Tehran, Iran
69. Zahmatkesh, M., Tabandeh, F., Ebrahimi, S., **Optimization of immobilization conditions of *Phanerochaete chrysosporium* fungi on calcium alginate beads for biodecolorization of synthetic dyes**; The 2nd International Student Conference of biotechnology, November, 2008, Tehran, Iran
70. Ghorbani, S., Tabandeh, F., Yakhchali, B., Mehrnia, M.R., Ghasemi, F., **Study on Cd²⁺ adsorption by protein nano-particles immobilized in Ca-alginate**; The 12th National Congress of Chemical Engineering, November, 2008, Tabriz, Iran
71. Shakibaie, M., Tabandeh, F., Zomorodipour, A.R., Ebrahimi, S., Habib Ghomi, H., Safari, S., **Effect of amino acids and precursors on the growth of recombinant CHO cells**; The 12th National Congress of Chemical Engineering, November, 2008, Tabriz, Iran
72. Zahmatkesh, M., Tabandeh, F., Ebrahimi, S., Ghasemi, F., **Comparison of biodecolorization efficiency of free and immobilized *Phanerochaete chrysosporium***; The 12th National Congress of Chemical Engineering, November, 2008, Tabriz, Iran
73. Ghasemi, F., Tabandeh, F., **"Biodegradation of soil polluted with Anthracene by two fungi: *Aspergillus niger* and *Phanerochaete chrysosporium* RP78"**; Technical Seminar on Oil, Gas and Environment, October, 2008, Shiraz, Iran
74. Ghorbani, S., Tabandeh, F., Yakhchali, B., Mehrnia, M.R., Ghasemi, F., **"Entrapment of nanobiofiber CS3 pili in Ca-alginate gel beads"**; International Congress of Nanoscience and Nanotechnology (ICNN2008), October, 2008, Tabriz, Iran
75. Mahdavi, S.R., Tabandeh, F., Yakhchali, B., Taeb, M., Ghasemi, F., **Enhancement of ligninase production in *Aspergillus niger* by UV irradiation**; The 15th National and 3rd International Conference of Biology, August, 2008, Tehran, Iran

76. Taheri, H.R., Tabandeh, F., Moraveg, H., ***Selection of lactic acid bacteria from broilers digestive tract as a source of probiotic***; The 15th National and 3rd International Conference of Biology, August, 2008, Tehran, Iran
77. Miri, S.M. , Bambai, B., Tabandeh, F., ***Cloning and expression of alkanehydroxylase 2 (AlkB2) of Alcanivorax borkuamensis in E. coli***; 10th Congress of Iranian Genetics Society, May, 2008, Tehran, Iran
78. Ghasemi, F., Tabandeh, F., ***Optimization of physico-chemical conditions for mycodecolorization of widely used textile industry azo dyes using Taguchi method***; The 5th International Congress of Chemical Engineering, January, 2008, Kish Island, Iran
79. Shahravi, A., Tabandeh, F., Bambai, B., Zamanizadeh, H., Mizani, M., ***Application of date powder as an economical sole carbon source for industrial production of three probiotic Lactobacillus strains***; The 2nd International Congress on Food and Nutrition, October, 2007, Istanbul, Turkey
80. Masoumi, F., Tabandeh, F., Ebrahimipour, G.H., Soudi, M.R., ***Screening, Identification and optimization of microorganisms for biological pretreatment of activated sludge system of soft-drink industries***; The 5th National Biotechnology congress, November, 2007, Tehran, Iran
81. Enayat zamir, K.G., Tabandeh, F., Yakhchali, B., Alikhani, H.A., Rastgar Jazi, F., ***Decolorization of two-azo dye mixtures by Phanerochaete chrysosporium***; The 5th National Biotechnology congress, November, 2007, Tehran, Iran
82. Ghaemi Oskouie, S.F., Tabandeh, F., Eftekhari, F., Ahmadi Danesh, H., Yakhchali, B., ***Alkaline protease production by Bacillus clausii for detergent industries***; Bio-International Convention, May, 2007, Boston, USA.
83. Ghaemi Oskouie, S.F., Tabandeh, F., Eftekhari, F., Ahmadi Danesh, H., Yakhchali, B., ***Optimization of culture medium for alkaline protease production using response surface methodology***; The 13th European Congress on Biotechnology, September, 2007, Barcelona, Spain
84. Ghasemi, F., Tabandeh, F., ***Expression profile of white-rot basidiomycete Phanerochaete chrysosporium RP78 during biodegradation of azo dyes***; The 4th International Medicinal Mushroom Conference, September, 2007, Slovenia
85. Ghasemi, F., Tabandeh, F., ***Evaluation of decolorization potential of Phanerochaete chrysosporium RP78 for different groups of azo dyes***; The 1st National Conference on Applied Microbiology, July, 2007, Tehran, Al-Zahra University
86. Tabandeh, F., Jahanshahi, M., Khodabandeh, M., Khavarpour, M., Danesh, H., ***Optimization of aqueous two phase system parameters for purification of nanobioparticles by using Taguchi method***; International conference on Biotechnology: Future Prospects in the Emirates, November, 2006, Al-Ain, UAE
87. Tabandeh, F., Hosseinian M, H.R., Yakhchali, B., Hamed Mousavian, M.T., ***Fed-batch fermentation of Bacillus sp. L2 for alkaline protease production using different feeding strategies***; The 11th National Congress of Chemical Engineering, November 2006, Tehran, Tarbiat Modares University
88. Tabandeh, F., Khodabandeh, M., Habib Ghomi, H., ***High cell density culture of recombinant E. coli using exponential, linear and stepwise feeding***; The 11th

National Congress of Chemical Engineering, November 2006, Tehran, Tarbiat Modares University

89. Tabandeh, F., Jahanshahi, M., Khodabandeh, M., Khavarpour, M., Danesh, H., ***Investigation of the partitioning behavior of plasmid DNA as a nanobioparticle in PEG300/salt aqueous two phase system;*** The 11th National Congress of Chemical Engineering, November 2006, Tehran, Tarbiat Modares University
90. Molaei YO, M., Tabandeh, F., Bambai, B., Roaiaii, A.M., ***Investigation of bagasse degradation using soil isolated fungi for enrichment of sugarcane fields;*** The Congress of Soil Position in the Environment and Sustainable Development, November 2006, Tehran, Tehran University
91. Hosseinian M, H.R., Tabandeh, F., Yakhchali, B., Hamed Mousavian, M.T., ***Enhanced Protease production by a Bacillus sp. Under fed-batch fermentation;*** The 14th National & 2nd International Conference of Biology, August, 2006, Tarbiat Modares University, Tehran, Iran
92. Hosseinian M, H.R., Tabandeh, F., Yakhchali, B., Hamed Mousavian, M.T., ***Protease production in batch culture of Bacillus isolated from soil;*** The 8th National Congress of Microbiology, May, 2006, Isfahan. I.R. Iran
93. Molaei YO, M., Tabandeh, F., Bambai, B., Roaiaii A, M., ***Screening of microorganisms for bagasse biodegradation;*** The 8th National Congress of Microbiology, May, 2006, Esfahan, I.R. Iran
94. Ghaemi Oskouie, S.F., Tabandeh, F., Eftekhari, F., Ahmadi Danesh, H., Yakhchali, B., ***The effect of environmental parameters on the growth and protease production by Bacillus licheniformis L2;*** The 4th National Congress of Biotechnology, August, 2005, Kerman, Iran
95. Tabandeh, F., Saffar, B., Tabandeh, A., ***The legal issue of stem cell research: a case study in Iran;*** International Congress of Bioethics, March 2005, I.R. Iran
96. Tabandeh, F., ***Recombinant protein production using fed-batch fermentation;*** National Seminar on Bioprocesses and Production Technologies, December 2004, India
97. Tabandeh, F., Saffar, B., Tabandeh, A., ***Concerning the Quranic view on stem cell research;*** Dubai International Genetic Conference, March 2004, Dubai, U.A.E.
98. Tabandeh, F., Yakhchali, B., Shojaosadati, S.A., Khodabandeh, M., Sanati, M.H., ***Expression of recombinant human growth hormone during high cell density cultivation;*** The 7th National Biochemistry Congress, January 2004, Ahvaz University, Ahvaz, Iran
99. Tabandeh, F., Shojaosadati, S.A., Khodabandeh, M., Sanati, M.H., Yakhchali, B., ***The effect of different feeding strategies on growth and substrate utilization during high cell density fermentation of recombinant E. coli;*** The 3rd National Biotechnology Congress, September 2003, Ferdowsi University, Mashad, Iran
100. Tabandeh, F., Shojaosadati, S.A., Khodabandeh, M., Sanati, M.H., Yakhchali, B., ***Heat-induced production of human growth hormone by high cell density culture of a recombinant E. coli in different media;*** The 7th National Congress of Chemical Engineering, October 2002, Tehran, Tehran University
101. Tabandeh, F., Yakhchali, B., Shojaosadati, S.A., ***Production of human growth hormone by high cell density cultivation of a heat-inducible recombinant E. coli***

in defined, semi-defined and complex media; The 9th Iranian Student Seminar in Europe (ISS-2002), June 2002, Birmingham, England. *The paper has been nominated as the outstanding paper among all received papers from outside of the U.K.*

102. Tabandeh, F., Yakhchali, B., Shojaosadati, S.A., Sanati, M.H., ***Human growth hormone production by batch fermentation of a heat-inducible recombinant E. coli;*** The 2nd National Biotechnology Congress, October 2001, Agricultural Biotechnology Research Institute of Iran
103. Tabandeh, F., Yakhchali, B., Shojaosadati, S.A., Sanati, M.H., ***Medium optimization of recombinant E. coli producing human growth hormone using Taguchi experimental design;*** The 6th National Congress of Chemical Engineering, May 2001, Isfahan, Technical University of Isfahan
104. Tabandeh, F., ***Energy production of main sources of biomass;*** Seminar on Development of Renewable Energy Applications, February 1998, Tehran, Ministry of Energy
105. Tabandeh, F., ***Energy from biomass in Iran – a case study;*** International Conference on Energy Research & Development (ICERD), November 1998, Kuwait
106. Tabandeh, F., Vasheghani-Farahani, E., ***Microbial production of polyhydroxybutyrate (PHB) as a biodegradable polymer;*** The 2nd National Congress of Chemical Engineering, March 1997, Tehran, Amir-Kabir University of Technology
107. Tabandeh, F., ***Production methods of biodegradable polymers;*** APO World Conference on Green Productivity, December 1996, Manilla, Phillippine
108. Tabandeh, F., ***The stabilization of polyurethanes against chemical degradation by bacteria;*** International Seminar of Science and Technology of Polymer, May 1994, Shiraz University

Research Interests

- **Bioprocess engineering especially in Biopharmaceuticals**
- **Probiotics**
- **Enzyme Technology**
- **Environmental Biotechnology**
- **Nanobiotechnology**

Professional Activities and Affiliations

- **Member of Focal Committee for Dairy products,** from 2011-onwards.
- **Experimental Design and optimization of Biotechnology Processes using Statistical Methods-basic course,** 2008, NIGEB, Tehran (as conductor and lecturer)
- **Biotechnology applications for removal of environmental pollutants,** 2008, Department of Environment (DOE), Tehran (as conductor and lecturer)
- **Experimental Design and optimization of Biotechnology Processes using Statistical Methods,** 2006, NIGEB, Tehran (as conductor and lecturer)
- **Member of the scientific/reviewing committees of several National and International Congresses in the field of Biotechnology, Microbiology and Chemical Engineering**
- **Scientific/reviewing of articles for National and International Journals such as IJB, AJB, BBEN, CEJC, CTBP, CYTO, IJCCE, EEM**

Society Membership

- ***European Federation of Biotechnology (EFB)***, from 2003-onwards
- ***Iranian Association of Biotechnology***, from 2000- onwards
- ***Iranian Society of Chemical Engineering***, from 2000- onwards
- ***Science Advisory Board (SAB)***, from 2008- onwards
- ***Iranian Bioethics Committee***, from 2005- onwards
- ***Iranian Association of Ethics in Science and Technology***, from 2005- onwards
- ***Young European Biotechnology Network (YEBN)***, from 2010 – onwards

Language Proficiency

Persian (Native language); **English** (Fluent)