

CURRICULUM VITAE

Dr. Shahab Faghihi

Present Address

Tissue Engineering and Biomaterials Research Center
National Institute of Genetic Engineering and Biotechnology (**NIGEB**)
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Languages: English; French

Academic Background

2003-2007	McGill University Doctor of Philosophy Biomedical Engineering	Advisor: Prof. Maryam Tabrizian
1996-1998	Iran University of Science and Technology Master of Science Inorganic Chemistry	
1991-1996	Kharazmi University Bachelor of Science Chemistry	

Distinctions and Credentials

2008	McGill Nominee (1 out of 2) for National Doctoral Prize in Natural Sciences and Engineering Council of Canada (NSERC), CANADA
2003-2007	PhD Scholarship, McGill University, Montreal, QC, CANADA
2005	McGill University Graduate Studies Scholarship, Montreal, CANADA
2005	Materials Research Society Award, Boston, USA
2004	Materials Research Society Travel Award, Boston, USA
1998	First Ranked Graduate Student, Iran University of Science and Technology, Tehran, Iran

Work Experience

2014- Present	Associate Professor National Institute of Genetic Engineering and Biotechnology Tehran, Iran
2015- 2016	Visiting Professor Helmholtz-Zentrum Geesthacht (Institute of Biomaterial Science); Teltow-Seehof, Deutschland
2008- 2014	Assistant Professor National Institute of Genetic Engineering and Biotechnology Tehran, Iran
2013- Present	Director Tissue Engineering Research Group National Institute of Genetic Engineering and Biotechnology
2012- 2014	Director Nano Biomaterials and Tissue Engineering Division National Institute of Genetic Engineering and Biotechnology
2010- 2012	Director Biomaterials and Tissue Engineering Research Center National Institute of Genetic Engineering and Biotechnology
2007- 2008	Research Associate Anatomy and Cell Biology Department McGill University, Montreal, CANADA
2002- 2003	Research Assistant Biomedical Engineering Department McGill University, Montreal, CANADA
1999- 2002	Director Research and Development Center Tehran Cement Company

Teaching Experience

- Biomedical Engineering Department, Mazyar University, Winter 2014, (*Forming Process and Fabrication of Implants; Undergraduate Level*)
- Biomedical Engineering Department, Mazyar University, Fall 2014, (*Biocompatibility; Graduate and Undergraduate Level*)
- Biomedical Engineering Department, Mazyar University, Winter 2013, (*Metallic Biomaterials; Graduate Level*)

Chemical Engineering Department, Iran University of Science and Technology Fall 2013
(*NanoBiotechnology; Graduate Level*)

Faculty of Biomedical Engineering, Tehran Polytechnique University, Fall 2008, Winter 2009,
Winter 2010 (*Metallic Biomaterials, Graduate Level*)

Faculty of Biomedical Engineering, Tehran Polytechnique University, Winter 2008, Winter
2009, (*Metallic Biomaterials, Undergraduate Level*)

Biomedical Engineering Department, Science & Research Branch, Azad University, Fall
2008, (*General Chemistry; Undergraduate level*)

Biomedical Engineering Department, McGill University, Winter 2007, (*Biomaterials and their
Bioperformances; Graduate Level*)

Services

Theoretical and Practical Workshop on **Transmission Electron Microscopy** (*May 2013*),
Instructor in collaboration with Electron Microscopy Facility at McGill University, Montreal,
CANADA.

Foundation of **Tissue Engineering and Biomaterials Research Center** (*March 2010*) at
National Institute of Genetic Engineering and Biotechnology, in association with **McGill
University, Tehran Heart Center, and Tehran University.**

Theoretical and Practical Workshop on **Functional Nanoporous Biomaterials: Modelling,
Design and Application** (*August 2010*) Instructor in collaboration with Simon Fraser
University, Vancouver, CANADA.

Establishing **Tissue Engineering Doctorate Program** at National Institute of Genetic
Engineering and Biotechnology, Tehran, Iran (*Since September 2012*).

Areas of Discipline

These are the disciplines that best correspond to my research interests:

Main Discipline

Biomedical Engineering

Tissue Engineering

Nanobiotechnology

Regenerative Medicine

Sub Discipline

Biomaterials- Biointerfaces

Hard and Soft Tissue Engineering,
Cardiovascular Tissue Engineering

Nanobiomaterials

Biomimetics- Delivery Systems

Supervisory Experience

PhDs

Mehrdad Mosazadeh	PhD	Supervisor	2013-Present
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Mahvash Hadavi	PhD	Advisor	2013-2018
Soheila Zamanloui	PhD	Supervisor	2013-2017
Hamid Reza Fasihi	PhD	Supervisor	2012-2016
Zahra Gorgin	PhD	Supervisor	2012-2016
Rana Imani	PhD	Co-Supervisor	2012-2015
Alireza Hassani	PhD	Advisor	2012-2014
Samaneh Hosseini	PhD	Co-Supervisor	2009-2013

Master's

Amir Hashemi	Master's	Co-Supervisor	2017-present
Hamide Safavipour	Master's	Co-Supervisor	2014-2016
Masoumeh Ezati	Master's	Supervisor	2014-2016
Mohadeseh Montazeri	Master's	Supervisor	2014-2016
Mahsa Gheisour	Master's	Supervisor	2013- 2015
Sepideh Mohammadi	Master's	Co-Supervisor	2013- 2015
Faranak Baniahmad	Master's	Co-Supervisor	2013- 2015
Armin Tahmasbi	Master's	Co-Supervisor	2012-2014
Ferdos Afghah	Master's	Co-Supervisor	2013- 2014
Alireza Karimi	Master's	Co-Supervisor	2011-2013
Maryam Ghaffari	Master's	Supervisor	2010-2012
Sorour Yousefi	Master's	Supervisor	2010-2012
Sonia Zia	Master's	Supervisor	2010-2012
Asma Motamedi	Master's	Supervisor	2010-2012
Amin Monfared	Master's	Supervisor	2010-2012
Mahsa Fakhraee	Master's	Supervisor	2009-2011
Mana Novin	Master's	Supervisor	2008-2010
Hanieh Moradian	Master's	Advisor	2011-2013

Undergraduate students

Armin Tahmasbi	Bachelor's	Co-Supervisor	2011-2012
Hanieh Moradian	Bachelor's	Co-Supervisor	2011-2012

Research Support and Funding

Project Title **Optimization of porous titanium granules for guided bone regeneration**
Principal investigator: Shahab Faghihi
Funding Organization: Iran National Science Foundation (INSF)
Duration of the grant: 2015-2017
Total: \$20,000

Project Title **Dual-functionalization of nano-graphene oxide for improved gene delivery to breast cancer cells**
Principal investigator: Shahab Faghihi
Funding Organization: National Institute of Genetic Engineering and Biotechnology
Duration of the grant: 2016-2017

Total:	\$10,000
Project Title	Design and fabrication of modified nano graphene oxide for potential cancer gene therapy
Principal investigator:	Shahab Faghihi
Funding Organization:	National Institute of Genetic Engineering and Biotechnology
Duration of the grant:	2015-2016
Total:	\$10,000
Project Title	Design and Fabrication of Advanced Membrane for Guided Bone Regeneration
Principal investigator:	Shahab Faghihi
Funding Organization:	National Institute of Genetic Engineering and Biotechnology
Duration of the grant:	2013-present
Total:	\$167,000
Project Title	A Novel Deep Brain Implantable Scaffold for Parkinson Disease Treatment Using Engineered Mesenchymal Stem Cell
Principal investigator:	Shahab Faghihi
Funding Organization:	Iranian Council of Stem Cell Technology (ICST)
Duration of the grant:	2013-2015
Total:	\$50,000
Project Title	Physical and Biological Behavior of Sr-Dopped Bioglass Coating on Titanium Substrates having different Crystallographic Structure
Principal investigator:	Shahab Faghihi
Funding Organization:	Maziar University
Duration of the grant:	2013-2014
Total:	\$7,000
Project Title	Design, Fabrication and biological characterization of a graphene reinforced nanocomposite hydrogel
Principal investigator:	Shahab Faghihi
Funding Organization:	Maziar University
Duration of the grant:	2013-2014
Total:	\$10,000
Project Title	Fabrication and Characterization of Zr-based Bulk Metallic Glasses for Bone Tissue Engineering
Principal investigator:	Shahab Faghihi
Funding Organization:	National Institute of Genetic Engineering and Biotechnology
Duration of the grant:	2011-2013
Total:	\$7,000
Project Title	Scale up Study for the Production of Rhamnolipid Biosurfactant in Fermentor

Principal investigator: Dr. Kambiz Akbari Noghabi
Co-investigator: Shahab Faghihi
Funding Organization: Iran National Science Foundation (INSF)
Duration of the grant: 2011-2014
Total: \$30,000

Project title **In Vitro Study of Biocompatibility and Physical/Mechanical Properties of Nanostructured Titanium Substrates Produced by Severe Plastic Deformation**

Principal investigator: Shahab Faghihi
Funding Organization: National Institute of Genetic Engineering and Biotechnology
Duration of the grant: 2008-2010
Total: \$7,000

Peer Reviewer

Materials Science and Engineering C (*Elsevier*)
Acta Biomaterialia (*Elsevier*)
Colloid and Surfaces B: Biointerfaces (*Elsevier*)
Surface and Coating Technology (*Elsevier*)
Iranian Journal of Biotechnology (*NIGEB*)

Conference Organization

Vice President and Scientific Chair of the *First National Congress on Application of Biomaterials in Regenerative Medicine*, Dec 2013, Tehran, Iran.

Peer Reviewed Publications (Trainee, * Corresponding Author)

54. Hosseini,S. Naderi-Manesh,H. Vali,H. Baghaban Eslaminejad, M. Sayahpour F, **Faghihi,S***.“ Contribution of osteocalcin mimetic peptide enhances osteogenic activity and extracellular matrix mineralization of human osteoblast-like cells” (**Material chemistry B: Revised**).
52. Hadavi, M. Hasannia, S*. Faghihi, S. Mashayekhi, F. Homazadeh, H. Mostofi, S.B. “Zein nanoparticle as a novel BMP6 derived peptide carrier for enhanced osteogenic differentiation of C2C12 cells” **Artificial cells, nanomedicine, and biotechnology**, 2018, doi.org/10.1080/21691401.2018.1431649.
53. 2018 Tahmasbi,R,A. **Faghihi,S***. “On the relation between crystal orientation of metallic substrates and human bone marrow stem cells response” (**Materials science and engineering C: Submitted**).
51. Imani,R*. Prakash,S. Vali, H. **Faghihi,S***. “Polyethylene glycol and octaarginine dual-functionalized nano-graphene oxide: An optimization for efficient nucleic acids delivery” (**Biomaterials Science: Revised**).
50. Fakhræe,M. Fasehee,M. Akbari,K. Davoodi,S. Vali,H. **Faghihi,S***. “Cancer biomarkers in atherosclerotic plaque: evidence from structural and proteomic analysis” (**Micron: Submitted**).

49. Ezati, M. Safavipour, H. Houshmand, B. Faghihi, S*. "Development of an electrospun PCL/Gelatin/Chitosan/ β -TCP composite membrane for GTR/GBR application", (**Submitted: Progress in biomaterials**).
48. Zamanlui, S. Mohammadi Amirabad, L. Soleimani, M*. Faghihi, S*. "Influence of hydrodynamic pressure on chondrogenic differentiation of human bone marrow mesenchymal stem cells cultured in perfusion system". (**Revised: Biologicals**).
47. Montazeri, M. Hashemi, M. Houshmand, M. Faghihi, S*. "The effect of bio-conditioning of titanium implants for enhancing osteogenic activity". (**Submitted: Oral implantology**).
46. Rahmani, S. Tabandeh, F*. Faghihi, S. Amoabediny, Gh. Shakibaie, M. Noorani, 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**; 2018, 67(1): 27-35.
45. Zamanlui, S. Mahmoudifard, M. Soleimani, M. Bakhshandeh, B. Vasei, M. Faghihi, S*. "Enhanced chondrogenic differentiation of human bone marrow mesenchymal stem cells on PCL/PLGA electrospun with different alignments and compositions". **International Journal of polymeric materials and polymeric biomaterials**; 2018, 67(1): 50-60.
44. Moradian, H. Keshvari, H. Fasehee, H. Dinarvand, R. Faghihi, S*. "Combining NT3-overexpressing MSCs and PLGA microcarriers for brain tissue engineering: A potential tool for treatment of Parkinsons disease". **Materials Science and Engineering C**; 2017, 76: 934-943.
43. Hadavi, M. Hasannia, S. Faghihi, S. Mashayekhi, F. Zadeh, H. Mostofi, S.B. "Novel calcified gum Arabic porous nano-composite scaffold for bone". **Biochemical and Biophysical Research Communication**; 2017, (488): 671-678.
42. Gorgin, Z. Houshmand, B. Abbasi, S. Shafiei, S. Faghihi, S*. "Biofunctionalization of titanium granules with simvastatin for improving osteogenic activity and antibacterial properties (Ex Vivo Study)". **The International Journal of Oral and Maxillofacial Implants**, 2017, 32(6): 1266-1272.
41. Fasehee, H. Ghavamzadeh, A. Alimoghaddam, K. Ghaffari, S.H. Faghihi, S*. "A Comparative Cytotoxic Evaluation of Disulfiram Encapsulated PLGA Nanoparticles on MCF-7 Cells". **International Journal of Hematology-Oncology and Stem Cell Research**; 2017, 11 (2): 102.
40. Imani, R. Shao, W. Taherkhani, S. Hojjati Emami, S. Faghihi, S*. "Dual- functionalized graphene oxide for enhanced siRNA delivery to breast cancer cells". **Colloids and Surfaces B: Biointerfaces**; 2016 (147): 315-325.
39. Gorgin, Z. Houshmand, B. Faghihi, S*. "Surface Modification of Porous Titanium Granules for Improving Bioactivity". **The International Journal of Oral and Maxillofacial Implants**; 2016, 31:1247-1280.
38. Fasehee, H. Zarrinrad, Gh. Tavangar, S.M. Gaffari, S.H. Faghihi, S*. The inhibitory effect of disulfiram encapsulated PLGA NPs on tumor growth: different administration routes. **Materials Science and Engineering C**; 2016, 63: 587-595.
37. Mohammadi, S. Keshvari, H. Eskandari, M. Faghihi, S*. "Graphene oxide-enriched double network hydrogel with tunable physic-mechanical properties and performance". **Reactive and Functional Polymers**; 2016, (106): 120 –131.

36. Imani, R. Shao, W. Hojjati Emami, S. Prakash, S*. **Faghihi, S***. "Improved dispersibility of nano-graphene oxide by amphiphilic polymer coatings for biomedical applications". *RSC Advances*; 2016 (6):77818–77829.
35. Imani, R. Hojjati Emami, S*. **Faghihi, S***. Nano-graphene oxide carboxylation for efficient bioconjugation applications: a quantitative optimization approach. *Journal of Nanoparticle Research*; 2015, 17 (2): 1-15.
34. Gorgin, Z. Houshmand, B. Abbasi, S. **Faghihi, S***. "Electrochemical anodic oxidation process of porous titanium granules for biomedical applications". *Scientia Iranica, Transactions F: Nanotechnology* 2015, (22): 2745-275.
33. Imani, R. Hojjati Emami, S*. **Faghihi, S***. "Synthesis and Characterization of Octaarginine Functionalized Graphene Oxide Nano-carrier for Intracellular Gene Delivery". *Physical Chemistry Chemical Physics*; 2015 (17) 6328-6339.
32. Imani, R. Hojjati Emami, S*. **Faghihi, S***. "Quantitative nano-graphene oxide carboxylation for efficient bioconjugation applications". *Journal of Nanoparticle Research*; 2015, 17 (2): 1-15.
31. Moradian, H. Fasehee, H. Keshvari, H, **Faghihi, S***. "Poly(ethyleneimine) functionalized carbon nanotubes as efficient nano-vector for transfecting mesenchymal stem cells" *Colloids and Surfaces B: Biointerfaces*; 2014, 122: 115–125.
30. Tahmasbi, R.A. Solati-Hashjin, M. Noor Azuan, A.O. **Faghihi, S***. "Improved bio-physical performance of hydroxyapatite coatings using electrophoretic deposition at dynamic voltage" *Ceramics International*; 2014. 40: 12681–12691.
29. Najafabadi, A.H. Abdouss, M*. **Faghihi, S.** "A novel method for synthesis of PEGlated chitosan nanoparticles as a carrier for poor water soluble drugs: Ibuprofen" *Materials Science and Engineering C*; 2014, 41: 91-99.
28. Najafabadi, A.H. Abdouss, M*. **Faghihi, S.** "Preparation and characterization of PEGlated chitosan nanocapsules as a carrier for pharmaceutical application" *Journal of Nanoparticle Research*; 2014, 16 (3): 1-14.
27. Hosseini, S. Naderi-Manesh, H. Vali, H. **Faghihi, S***. "Improved surface bioactivity of stainless steel substrates using osteocalcin mimetic peptide" *Materials Chemistry and Physics*; 2014, 143 (3): 1364–1371.
26. Karimi, A. Navidbakhsh*, **Faghihi, S.** "Measurement of the Mechanical Failure of Polyvinyl Alcohol Sponge Using Biaxial Puncture Test", *Journal of Biomaterials and Tissue Engineering*; 2014, 4: 1–5.
25. **Faghihi, S***. Gheysour, M. Karimi, A. Salarian, R. "Fabrication and mechanical characterization of graphene oxide-reinforced poly (acrylic acid)/gelatin composite hydrogels" *Journal of Applied Physics*; 2014, 115 (8), 083513.
24. **Faghihi, S***. Karimi, A. Jamadi, M. Imani, R. Salarian, R. "Graphene oxide/poly (acrylic acid)/gelatin nanocomposite hydrogel: experimental and numerical validation of hyperelastic model", *Materials Science and Engineering C*; 2014, 38: 299-305.
23. Monfared, A. **Faghihi, S.** Karami, H*. "Biocorrosion and surface wettability of Ni-free Zr-based bulk metallic glasses" *International Journal of Electrochemical Science*; 2013, 8: 7744-7752.

22. Monfared, A. Vali, H. **Faghihi, S***. "Biocorrosion and biocompatibility of Zr-Cu-Fe-Al bulk metallic glasses" *Surface and Interface Analysis*; 2013, 45: 1714-1720.
21. Karimi, A. Navidbakhsh, M. Shojaei, A. Hassani, K. **Faghihi, S***. "Study of plaque vulnerability in coronary artery using Mooney-Rivlin model: A combination of finite element and experimental method" *Journal of Biomedical Engineering: Applications, Basis and Communications*; 2013, 26 (1): 145-152.
20. Karimi, A. Navidbakhsh, M. Shojaei, A and **Faghihi, S***. "Measurement of the uniaxial mechanical properties of healthy and atherosclerotic human coronary arteries" *Materials Science and Engineering C*; 2013, 33(5): 2550-2554.
19. Ghaffari, M. Moztarzadeh, M. Sepahvandi, F. Mozafari, A. **Faghihi, S***. "How bone marrow-derived human mesenchymal stem cells respond to poorly crystalline apatite coated orthopedic and dental titanium implants" *Ceramics International*, 2013, 39: 7793-7802.
18. Hosseini, S. Naderi-Manesh, H*. Mountassif, D. Cerruti, M. Vali, H and **Faghihi, S***. "C-terminal Amidation of an Osteocalcin-derived Peptide Promotes Hydroxyapatite Crystallization" *The Journal of Biological Chemistry*; 2013, 288 (11): 7885-7893.
17. Karimi, A. Navidbakhsh, M. Motevalli Haghi, A. and **Faghihi, S***. "An innovative shape equation to quantify the morphological characteristics of parasitized red blood cells by Plasmodium falciparum and Plasmodium vivax" *Journal of Engineering in Medicine*; 2013, 227(4):428-437.
16. Karimi, A. Navidbakhsh, M. **Faghihi, S**, Shojaei, A Hassani, K*. "A finite element investigation on plaque vulnerability in realistic healthy and atherosclerotic human coronary arteries" *Journal of Engineering in Medicine*; 2013; 227(2) 148–161.
15. Karimi, A. Navidbakhsh, M. Motevalli Haghi, A. **Faghihi, S***. "Measurement of the uniaxial mechanical properties of rat brains infected by Plasmodium berghei ANKA" *Journal of Engineering in Medicine*; 2013; 227(5): 609-614.
14. Rad, A.T. Novin, M, Solati-Hashjin, M, Vali H, **Faghihi S***. "The effect of crystallographic orientation of titanium substrate on the structure and bioperformance of hydroxyapatite coatings" *Colloids and Surfaces B: Biointerfaces*, 2013, 103, 200-208.
13. Novin, M. **Faghihi, S***. "Mouse bone marrow-derived mesenchymal stem cell response to nanostructured titanium substrates produced by high-pressure torsion" *Surface and Interface Analysis*, 2013, 45, 619–627.
12. **Faghihi, S***. Zia, S. Fakhr Taha, M. "Adipose tissue-derived stem cell response to the differently processed 316L stainless steel substrates" *Tissue and Cell*, 2013, 44, 365–372.
11. **Faghihi, S***. Li, D. Szpunar, J.A. "Tribocorrosion of nanostructured titanium processes by severe plastic deformation" *Nanotechnology*, 2010, 3, 21(48):485703.
10. Faghihi, S. Azari, F. Szpunar, J.A. Vali, H. Tabrizian, M*. "Titanium crystal orientation as tool for improved and regulated cell attachment", *Journal of Biomedical Materials Research A*, 2009, 91A (3), 656-662.
9. **Faghihi, S***. Vali, H and Tabrizian, M. "Effects of crystal size and orientation of substrates on cell adhesion: Implication for Medical Implants", *International Journal of Modern Physics B*, 2008, 22(18/19), 3069-3081.

8. Azzi, M*, **Faghihi, S.** Tabrizian, M. Szpunar, J. A “Electrochemical behaviour of (001), (100) and (110) titanium single crystals under simulated body fluid condition”, **Ceramic Transactions**, 2008, 200:443-451.
7. **Faghihi, S.** Zhilyaev, A.P. Szpunar, J.A. Azari, F. Vali, H. Tabrizian, M*. “Novel nanostructured titanium material produced by high pressure torsion improves pre-osteoblast adhesion and growth”, **Advanced Materials** 2007, 19(8): 1069-1073.
6. **Faghihi, S.** Azari, F. Zhilyaev, A.P. Szpunar, J.A. Vali, H. Tabrizian, M*. “Cellular and molecular interactions between MC3T3-E1 pre-osteoblasts and nanostructured titanium produced by high-pressure torsion”, **Biomaterials** 2007, 28 (27), 3887-3895.
5. **Faghihi, S.** Azari, F. Li, H. Bateni, M.R. Szpunar, J.A. Vali, H. Tabrizian, M*. “The significance of crystallographic texture of titanium alloy substrates on pre-osteoblast responses”, **Biomaterials** 2006; 27(19):3532-3539.
4. **Faghihi, S***. Azari, F. Bateni, M.R. Szpunar, J.A. Vali, H. Tabrizian, M. “The role of crystallographic texture of Ti-6Al-4V alloy on cell attachment and proliferation”, **Materials Science Forum** 2005;495:705-710.
3. Thierry, B. **Faghihi, S.** Torab, L. Pike, B. Tabrizian, M*. “Magnetic resonance signal-enhancing self-assembled coating for endovascular devices”, **Advanced Materials** 2005; 17(7):826-830.
2. Thierry, B. **Faghihi, S.** Tabrizian, M*. “Magnetic resonance signal-enhancing self-assembled coating for endovascular devices”, **American Chemical Society** 2003; 226:U491.
1. Taeb, A*. **Faghihi, S.** “Application of copper slag in the cement industry”, **ZKG International** 2002; 55(4): 98-100.

Abstracts and Conference Presentations (Presenting author is underlined)

23. **Faghihi, S.** Li, D. Szpunar, J.A. “Improved Tribocorrosion Behaviour of Nanostructured Titanium by Severe Plastic Deformation Process”, **4th International Conference on Nanostructures**, 2012, Kish, Iran.
22. Novin, N. Faghihi, S. “Nanostructuring of Titanium by High Pressure Torsion Influences Mesenchymal Stem Cell Response and Bacterial Adhesion”, **World Conference on Regenerative Medicine**, 2011, Leipzig, Germany.
21. Fakhraee, M. Fasehee, H.R. Akbari, K. Davoodi, S. Vali, H. and **Faghihi, S.** “The Protein and Lipid Composition of Atherosclerotic Plaque and Its Structural Analysis”, **World Conference on Regenerative Medicine**, 2011, Leipzig, Germany.
20. Fakhraee, M. Fasehee, H.R. Akbari, K. Davoodi, S. Vali, H. and **Faghihi, S.** “Biochemical and Morphological Analysis of In-stent Restenosis between Different Stages of Plaque Development”, **International Conference on Tissue Engineering**, 2011, Lisbon, Portugal.
19. Tahmasbi Rad, A. Novin, M. Solati-Hashjin, M. **Faghihi, S.** “The Effects of Electrophoretic Nanohydroxyapatite Coating on biological properties of Titanium Implants”, **3rd International Conference on UltraFine Grained and Nanostructured Materials (UFGNSM)**, 2011, Tehran, Iran.

18. Tahmasbi Rad, A. Faghihi, S. Novin, M. Solati-Hashjin, M. "The Effect of Crystallographic Orientation on Biological Properties of Electrophoretic Hydroxyapatite Coated of Titanium Implants", **24th European Conference on Biomaterials**, 2011, Dublin, Ireland.
17. Tahmasbi Rad, A. Faghihi, S. Solati-Hashjin, M. Novin, M. "Effects of Hydroxyapatite Coatings on Biological Properties of Titanium Implants", **8th Iranian Ceramic Congress**, 2011, Tehran, Iran.
16. Novin, M. Faghihi, S. "Nanostructuring Titanium Substrates by High Pressure Torsion Enhance Surface Bioactivity", **3rd International Congress on Nanoscience and Nanotechnology**, 2010, Shiraz- Iran.
15. Novin, M. Faghihi, S. "Enhanced Surface Bioactivity of Nanostructured CP-Ti Substrates Processed by Sever Plastic Deformation", **23rd Annual Conference of European Society for Biomaterials (ESB)**, 2010, Tampere, Finland.
14. Novin, M. Faghihi, S. "Mouse Bone Marrow Mesenchymal Stem Cellular Response to Nanostructured CP-Ti Substrate", **European Orthopedic Research Society (EORS)**, 2010, Swiss.
13. Azzi, M. Faghihi, S. Tabrizian, M. Szpunar, J. A "Electrochemical behaviour of (001), (100) and (110) titanium single crystals under simulated body fluid condition", **The International Conference on Texture of Materials (ICOTOM 15)**, 2008, Pittsburgh, PA, USA.
12. Faghihi, S. Azari, F. Szpunar, J.A. Vali, H. Tabrizian, M. "Implication of crystal orientation in controlling cell attachment" **32th Annual Meeting of Society for Biomaterials (SFB)** 2007;IL, USA.
11. Azzi, M. Faghihi, S. Tabrizian, M. Szpunar, J.A. "Tribocorrosion behavior of Ti-6Al-4V under simulated body fluid condition", **International Conference on Processing & Manufacturing of Advanced Materials** 2006; Vancouver, Canada.
10. Faghihi, S. Azari, F. Bateni, M. R. Szpunar, J.A. Vali, H. Tabrizian, M. "Preparation and characterization of nano- grain size CP-Ti: A potential materials as dental implants", **Materials Research Society (MRS)** 2006, CA, USA
9. Faghihi, S. Azari, F. Bateni, M. R. Szpunar, J.A. Vali, H. Tabrizian, M. "A prospective study to improve osseointegration of CP-titanium considering its crystallographic texture", **30th Annual Meeting of Society for Biomaterials (SFB)** 2005, TN, USA.
8. Faghihi, S., Bateni, M.R., Azari, F., Szpunar, J.A., Vali, H., and Tabrizian, M. "Responses of MC3T3 to the Crystallographic Texture of Titanium", **Materials Research Society (MRS)** 2004, MA, USA.
7. Thierry, B. Faghihi, S. Tabrizian, M. "Magnetic resonance signal-enhancing self-assembled coating for endovascular devices", **226th ACS National Meeting** 2003, New York, NY.
6. Faghihi, S. Chehregani, H. Ghaemi, M. "Determination of optima ratio for utilization of rotary cement kiln dust" **The First International Conference on Concrete and Development** 2001, Tehran, Iran.

5. **Faghihi, S.** "Effect of particle size grading on properties of copper slag cement", **The First International Conference on Concrete and Development** 2001, Tehran, Iran.
4. **Faghihi, S.** and Taeb, S. "Study of utilization of copper slag in blended cement", **4th National Congress on Chemical Engineering** 2001, Tehran, Iran.
3. **Faghihi, S.** and Kalantari, F. "Studying the effects of chemical factors in Aging", **The First International Conference on Aging** 1999, Tehran, Iran.
2. **Faghihi, S.** and Taeb, A. "Utilization of sarcheshmeh copper complex waste materials in cement industry", **The 13th Iranian Congress of Chemistry and Chemical Engineering** 1999, Tehran, Iran.
1. **Faghihi, S.** "Role of vitamins and antioxidants in aging process", **The First International Conference on Aging** 1999, Tehran, Iran.

Patents

5. **Jamadi, M.** Houshmand, B. Shokrollahi, P. Daliri, M. Faghihi, S. "Hydrogel based bioimplant as soft tissue expander for reconstruction and maxillofacial surgeries" 89/011572, August 31, 2016 (Iran).
4. **Zamanlui, S.** Soleimani, M. Faghihi, S. "Fabrication of perfusion bioreactor as inducer of hydrodynamic forces for enhanced chondrogenic differentiation" 92/001479, January 29, 2017 (Iran).
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