

Personal details:

Name: Marjan

Surname: Behroozibakhsh

Academic Rank: Associate Professor, Tehran University of Medical Sciences,
School of Dentistry, Dental Biomaterials Department

Education

1. Ph.D.

Dental materials, Tehran University of Medical Sciences, Tehran, Iran, 2007-2012

Thesis Title:

Effect of Nano-fluorohydroxyapatite on Defected Enamel and Remineralization Process

2. DDS.

Islamic Azad University, Tehran, Iran, 2001

Thesis Title:

Evaluation of Performance of School-Based Fluoride Mouthrinse Program in Primary
Schools of Tehran.2000-2001

Executive position

- 1. Head of Dental Reference Laboratory, Dental Research Center, Dentistry Research Institute, Tehran University of Medical Science**
- 2. Vice-Dean for Global Strategies and International Affairs at Dentistry Research Institute, Tehran University of Medical Science**
- 3. Executive Editor of the Journal of Dental Medicine of Tehran University of Medical Sciences**
2010-up to 2024
- 4. Secretary of ISO technical committee corresponding to 106, ISIRI/TC106**
Institute of Standards and Industrial Research of Iran, 2012-up to 2025

5. **Representative of the School of Dentistry in the Alumni Office of Tehran University of Medical Sciences**

Tehran University of Medical Sciences, 2012-up to 2025

6. **Representative of innovation Headquarters of the Faculty of Dentistry**

Tehran University of Medical Sciences, 2012-up to 2018

Teaching

Teaching the following courses to Iranian and International students:

- 1- Dental Materials
- 2- Advanced Sciences
- 3- Testing of dental materials properties
- 4- Applied experimental equipment
- 5- Practical dental materials

Workshops/ Short Courses

- 1- Short term research experience in TMDU (Tokyo Medical and Dental University), Japan.2011

Workshops:

- 1- Introduction to Powder X-ray Diffraction, Iran Nanotechnology Laboratory Network, Participant
- 2- Workshop on X-ray diffraction (XRD) applications: Advanced workshop. Iran Nanotechnology Laboratory Network, Amikabir University, 2014 Participant
- 3- Advanced Workshop on sample preparation methods and analysis of data of Atomic force microscopy (AFM), Iran Nanotechnology Laboratory Network, Sharif University, 2014 Participant

- 4- Workshop: Identification of Clay Minerals by X-ray Diffraction Analysis, Tehran University/College of Engineering, Tehran University/College of Engineering, 2013
- 5- Application of dental mesenchymal stem cells and bone marrow in tissue engineering, Rooyan Institute, Tehran/Iran, 2012.
- 6- Dental Biomaterials, Shahid Beheshti University of Medical Sciences, Tehran/Iran, Enamel Remineralization with Nanofluorohydroxyapatite, 2012 Presentation, Lecturer
- 7- Biomaterials, (Biomaterials Research Center (BRC), Tehran/Iran, 2010.
- 8- Synthesis and Analysis of Materials , Pooya Pajohesh Institute, Tehran/Iran, 2010
- 9- Principles of Tissue Engineering and Scaffold Fabrication. Stem Cell Research Center and SABZ Biomedical Company, Tehran/Iran, 2010 P
- 10- Usage of Polymers in Dentistry, Iran Polymer & Petrochemical Institute, Karaj, 2007 Participant

Papers

1. Correlation between gingival fibroblast cell viability and degree of conversion of resin composites at different light-curing tip distances
Authors: A Hashemian, M Hodjat, M Behroozibakhsh
Journal of Oral Biology and Craniofacial Research 15 (6), 1793-1798
2. Pre-vascularized porous gelatin-coated β -tricalcium phosphate scaffolds for bone regeneration: an in vivo and in vitro investigation
Authors: Hanieh Nokhbatolfoghahaei, Sahar Baniameri, Reza Tabrizi, Amir-Ali Yousefi-Koma, Mohammad Mehdi Dehghan, Samira Derakhshan, Niusa Gharehdaghi, Saeed Farzad-Mohajeri, **Marjan Behroozibakhsh**, Arash Khojasteh
Journal: In Vitro Cellular & Developmental Biology-Animal 61(1), 67-80, 2025
3. Physical/mechanical properties and ion release ability of an experimental dental resin infiltrant containing silanized fluoride-doped bioactive glass
Authors

Atieh Hashemian, Zahra Gonbadi, Bahaa AlBakhakh, Barzin Safarkoopayeh, Farzaneh Manouchehri, Pardis Akbari, [Marjan Behroozibakhsh*](#)
Journal of Functional Composites and Structures 7(4), 2025

4. Fracture toughness evaluation at the interface of universal adhesives and tooth dentine using mini-interfacial fracture toughness test

Y Sanaee, K Shekofteh, B AlBakhakh, T Hooshmand, A Hashemian, Aisan Nouri, [Marjan Behroozibakhsh*](#)
Journal of Adhesion Science and Technology 39 (2), 244-256,2025

5. Evaluation of physical/mechanical properties of an experimental dental composite modified with a zirconium-based metal-organic framework (MOF) as an innovative dental filler

K Shekofteh, TJ Kashi, [M Behroozibakhsh](#), A Sadr, F Najafi, H Bagheri
Dental Materials,2023

6. Comparison of Dentin Caries Remineralization with Four Bioactive Cements.

S Valizadeh, SSH Kamangar, MH Nekoofar, [M Behroozibakhsh](#), ...
The European Journal of Prosthodontics and Restorative Dentistry

7. Repairability of aged dimethacrylate-free ORMOCER-based dental composite resins with different surface roughening methods and intermediate materials

Maryam Pirmoradian, Bahaa Abdulrazzaq Jerri Al-Bakhakh, [Marjan Behroozibakhsh](#), Parham Pedram
The Journal of Prosthetic Dentistry,2022
doi.org/10.1016/j.prosdent.2022.04.001

8. A modified TEGDMA-based resin infiltrant using polyurethane acrylate oligomer and remineralising nano-fillers with improved physical properties and remineralisation potential

Atieh Hashemian, Sima Shahabi, [Marjan Behroozibakhsh*](#), Farhood Najafi, Bahaa Abdulrazzaq Jerri Al-Bakhakh, Hamidreza Hajizamani
Journal of Dentistry, volume113, pages 103810, 2021
Marjan Behroozibakhsh: Corresponding author

9. Effect of Cold Atmospheric Pressure Plasma Coupled with Resin-Containing and Xylitol-Containing Fluoride Varnishes on Enamel Erosion
Z Khoubrouypak, M Abbasi, E Ahmadi, N Rafeie, M Behroozibakhsh
International Journal of Dentistry, 2021
10. Preparation of a PLGA-coated porous bioactive glass scaffold with improved mechanical properties for bone tissue engineering approaches
Alireza Valanezhad, Sima Shahabi, Atieh Hashemian, Sotoudeh Davaie, Mohammad Reza Nourani, Shigeaki Abe, Ikuya Watanabe, Marjan Behroozibakhsh*,
Regenerative Engineering and Translational Medicine, 7, 175–183, 2021
Corresponding author: Marjan Behroozibakhsh
11. Outcome of Different Processing Methods on Mechanical and Physicochemical Properties of Human Dentin as a Potential Natural Scaffold
Yasaman Erfan, Tahereh Sadat Jafarzadeh Kashi, Fahimeh Tabatabaei, Seyyed Mostafa Fatemi, Shima Esmailzadeh, Babak Seraj, Marjan Behroozibakhsh*
Regenerative Engineering and Translational Medicine.7(1), 2021
Corresponding author: Marjan Behroozibakhsh
12. Bioactive Glass Modified Calcium Phosphate Cement with Improved Bioactive Properties: A Potential Material for Dental Pulp-Capping Approaches
Sotoudeh Davaie, Sima Shahabi, Marjan Behroozibakhsh*, Sanaz Vali, Farhood Najafi, Journal of Biomimetics, Biomaterials and Biomedical Engineering, 41.1-14.2021
Corresponding author: Marjan Behroozibakhsh
13. The antibacterial activity of an epoxy resin-based dental sealer containing bioactive glass, hydroxyapatite, and fluorohydroxyapatite nanoparticles against Enterococcus Faecalis and Streptococcus mitis
Authors: Bahaa Abdulrazzaq Jerri Al-Bakhsh, Farhad Shafiei, Maryam Pourhajibagher, Kiana Shekofteh, Atieh Hashemian, Marjan Behroozibakhsh*
Nanomedicine Journal, 7(1), 2020
Corresponding author: Marjan Behroozibakhsh
14. Resistance to demineralisation of adjacent enamel and dentine, fluoride release and dentine bond strength of fluoride-containing self-etch adhesive systems

Maryam Pirmoradian, Shima Esmailzadeh, Sotoudeh Davaie, Bahaa-Abdulrazzaq-Jerri Albakhakh, Bahareh Sanaee, Elnaz Asgari, Kiana Shekofteh, Sareh Habibzadeh, **Marjan Behroozibakhsh***,
Journal of clinical and experimental dentistry, 12(4): e381–e390, 2020
Corresponding author: Marjan Behroozibakhsh

15. In-vitro bioactivity evaluation and physical properties of an epoxy-based dental sealer reinforced with synthesized fluorine-substituted hydroxyapatite, hydroxyapatite and bioactive glass nanofillers

Authors:

Bahaa Abdulrazzaq Jerri Al -
Bakhsh, Farhad Shafiei, Atieh Hashemian, Kiana Shekofteh, Behnam Bolhari, **Marjan Behroozibakhsh*** (corresponding author)
Bioactive Materials, Volume 4, Pages 322-333, 2019
Corresponding author: Marjan Behroozibakhsh

16. Comparative Assessment of Crystalline Structure of Powder and Bulk Human Dental Enamel Using X-Ray Diffraction Analysis

Authors: **Marjan Behroozibakhsh***, Hamidreza Hajizamani, Kiana Shekofteh, Mansooreh Otadi, Mehrosima Ghavami-Lahiji, Neda Sadat Faal Nazari
Journal of Oral Biosciences, volume 61, 3, pages 173-178, 2019
Corresponding author: Marjan Behroozibakhsh

17. Evaluation of bonding effectiveness of a self-etch and an etch-and-rinse adhesive resin to un-treated and Er: Yag laser treated dentin using mini-interfacial fracture toughness

Authors: **Marjan Behroozibakhsh***, Sotoudeh Davaie, Abbas Monzavi, Tayebbeh Abazari, Sima Shahabi, Maryam Pirmoradian
Journal of Adhesion Science and Technology, Vol 33, no 11, Year 2019.
Corresponding author: Marjan Behroozibakhsh

18. Interfacial fracture toughness of self-adhesive and conventional flowable composites to dentin using different dentin pretreatments

Authors: Mohammad A Keshvad, Tabassom Hooshmand, **Marjan Behroozibakhsh**, Sotoodeh Davaei
Journal of Investigative and Clinical Dentistry, 5:e12414, 2019.

19. Prevention of white spot lesions using three remineralizing agents: An in vitro comparative study

Authors: Soodeh Tahmasbi, Seyedezahra Mousavi, **Marjan Behroozibakhsh**, Mohammadreza Badiie

J Dent Res Dent Clin Dent Prospects, vol 13, No 1, 36–42., 2019.

20. Evaluation of crystalline changes and resistance to demineralization of the surface of human dental enamel treated with Er:YAG laser and fluoride using x-ray diffraction analysis and Vickers microhardness

Authors: **Marjan Behroozibakhsh***, Sima Shahabi, Mehrsima Ghavami-Lahiji, Safura Sadeghian, Neda Sadat Faal Nazari.

Laser Physics, Vol.28, No.6, Year. 2018,

Corresponding author: Marjan Behroozibakhsh

21. Effects of incorporation of 2.5 and 5 wt% TiO₂ nanotubes on fracture toughness, flexural strength, and microhardness of denture base poly methyl methacrylate (PMMA)

Authors: Sahar Abdulrazzaq Naji, **Marjan Behroozibakhsh (equal contribution with the first author)**, Tahereh Sadat Jafarzadeh Kashi, Hossein Eslami, Reza Masaeli, Hosseinali Mahgoli, Mohammadreza Tahriri, Mehrsima Ghavvami Lahiji, Vahid Rakhshan.

The Journal of Advanced Prosthodontics, Vol.10, No.2, Year. 2018,

22. The effect of thermocycling on the degree of conversion and mechanical properties of a microhybrid dental resin composite

Authors: Mehrsima Ghavami-Lahiji , Melika Firouzmanesh , Hossein Bagheri , Tahereh S. Jafarzadeh Kashi, Fateme Razazpour, **Marjan Behroozibakhsh**.

Restor Dent Endod, Vol.43, No.2, Year. 2018,

23. Bond strength of self-adhesive resin cement to base metal alloys having different surface treatments

Authors: F Shafiei, **M Behroozibakhsh*** (corresponding author), A Abbasian, S Shahnavaizi.

Dental Research Journal, Vol.15, No.1, Year. 2018,

Corresponding author: Marjan Behroozibakhsh

24. Recent Advances and Future Perspectives for Reinforcement of Poly(methyl methacrylate) Denture Base Materials: A Literature Review

Authors: Sahar Abdulrazzaq Naji, Tahereh sadat Jafarzadeh Kashi, **Marjan Behroozibakhsh** (corresponding author), Hamidreza Hajizamani, Sareh Habibzadeh.

J Dent Biomater, Vol.5, No.1, Year. 2018,

Corresponding author: Marjan Behroozibakhsh

25. A review of applications of fourier transform infrared spectroscopy in dental research

Authors: M Ghavami Lahiji, **M Behroozibakhsh**, TSJ Kashi.

Journal of Dental Medicine(Tehran University of Medical Sciences), Vol.30, No.4, Year. 2018,

26. Evaluation of antimicrobial properties of conventional Poly(methyl methacrylate) denture base resin materials containing hydrothermally synthesised anatase TiO₂ nanotubes against cariogenic bacteria and Candida albicans

Authors: Sahar Abdulrazzaq Naji, Tahereh Sadat Jafarzadeh Kashi , Maryam Pourhajibagher, **Marjan Behroozibakhsh (corresponding author)** , Reza Masaeli, Abbas Bahador

Iranian Journal of Pharmaceutical Research, 2018 (accepted)

Corresponding author: Marjan Behroozibakhsh

27. Effect of Storage Time and Temperature on Dimensional Stability of Impressions Made with Zinc Oxide Impression Paste

Authors: Sareh Habibzadeh, Shima Safaeian, **Marjan Behruzibakhsh**, Parisa Kaviyan.

Journal of Dentistry of Tehran University of Medical Sciences, Vol.13, No.3, Year. 2017,

28. Leucine-rich amelogenin peptide (LRAP) as a surface primer for biomimetic remineralization of superficial enamel defects: An in vitro study

Authors: Shafiei F, Hossein BG, Farajollahi MM, Fathollah M, **Marjan B**, Tahereh JK..

Scanning, Vol.12, Year. 2015,

29. Evaluation of polymerization efficacy in composite resins via FT-IR spectroscopy and Vickers microhardness test

Authors: Tahereh-Sadat Jafarzadeh, Mohammad Erfan, **Marjan Behroozibakhsh**, Mostafa Fatemi, Reza Masaeli, Yashar Rezaei, Hossein Bagheri, Yasaman Erfan. Journal of dental research, dental clinics, dental prospects, Vol.9, No.4, Year. 2015,

30. Effect of a synthetic nanocrystalline-fluorohydroxyapatite on the eroded enamel lesions

Authors: M. Behroozibakhsh, F. Shafiei , T. Hooshmand , F. Moztarzadeh , M. Tahriri , H. Bagheri Gorgani
Dental materials, Vol.30, No.Supplement 1, Year. 2014, Conference paper

31. Interfacial fracture toughness of different resin cements bonded to a lithium disilicate glass ceramic

Authors: Tabassom Hooshmand, Golriz Rostami, Marjan Behroozibakhsh, Mostafa Fatemi, Alireza Keshvad, Richard van Noort .
Journal of Dentistry, Vol.40, No.2, Year. 2012, Page:139-45,

32. Nanocrystalline fluorine-substituted hydroxyapatite $[Ca_5(PO_4)_3(OH)_{1-x}F_x]$ for biomedical applications: Preparation and characterization

Authors: Farhad Shafiei , Marjan Behroozibakhsh, Fathollah Moztarzadeh , Mohammadreza Tahriri.
Micro & Nano Letters, Vol.7, No.2, Year. 2012, Page:109-114,
Corresponding author: Marjan Behroozibakhsh

33. Evaluation of the degree of conversion of micro hybrid ,nano hybrid and ORMOCER resin composites using LED & QTH photo-polymerization

Authors: Tahereh Sadat Jafarzadeh Kashi, Mohammad Erfan, Akbar Fazel Najafabadi, Marjan Behroozibakhsh, Mostafa Fatemi,Haleh Hali, Hosein Bagheri Gorgani.
Journal of Dental Medicine-Tehran University of Medical Sciences, Vol.25, No.2, Year. 2012, Page:83-88,

34. The Effect of Temperature on the Efficacy of Polymerization of a Dental Resin Composite

Authors: T.S. Jafarzadeh Kashi, M. Behroozibakhsh, S.M. Fatemi, M.Erfan, H. Bagheri G .
Dental Materials, Vol.26, Year. 2010, Page: e19, Conference paper

35. Degree of conversion of nano- and micro-hybrid resin composites cured by different light sources

Authors: T.S. Jafarzadeh Kashi, H. Bagheri G, M. Behroozibakhsh, S.M. Fatemi, Y. Rezaei.
Dental Materials, Vol.26, Year. 2010, Page: e18, Conference paper

Presentations and Abstracts

1. Degree of conversion of an epoxy-based dental sealer reinforced with Bioactive Nano-fillers

R Behmanesh, M Behroozibakhsh, K Shekofteh, A Hashemian

Dental Materials 41, e86

Dental Materials Congress, Turin, Italy

2. Zirconia-reinforced lithium silicate (ZLS): A promising hybrid ceramic material in dentistry

22 th International Congress of Iranian Association of Prosthodontists, 2023

3. How to choose an appropriate dental composite according to different clinical situations

60th Annual International Congress of Iranian Dental Association, 2022

4. Dental Composites,

Aesthetic course (webinar), Iranian Dental Biomaterials Association, 2021

5. Etiology of Discolorations (webinar)

Iranian Dental Biomaterials Association, 2021

6. Introduction to Properties of Dental Materials, How to Evaluate the Materials' Properties?

TUMS Dentistry Winter School -virtually in February 2020

Dr. Marjan Behroozibakhsh

7. New dental adhesives. 69th of IGDA (Iranian General Dentists Association). 2018

8. Usage of nanotechnology in preventive dentistry. 3rd Congress of Oral Health and Epidemiology, 2018

9. Effect of a synthetic nanocrystalline-fluorohydroxyapatite on the eroded enamel lesions

Academy of Dental Materials

Location: Bologna, Italy, Date: 2014

Authors: M. Behroozibakhsh, F. Shafiei , T. Hooshmand , F. Moztarzadeh , M. Tahriri , H. Bagheri Gorgani ,Type : Poster, Lecturer,

10. Shear bond strength of self-adhesive resin cements to base metal alloys having different surface treatments.

14th International Congress of Iranian Association of Prosthodontists, Date: 2014-
Type : Oral Presentation & Abstract, Lecturer,

11. Biomimetic Synthetic Enamel: A Potential Remineralizing Agent for Enamel Repair

9th Iranian & 13th Kuwaiti Divisions of IADR joint Congress. Date: 2013-Type :
Abstract, others,

12. Leucine-Rich-Amelogenin Peptide (LRAP) Assembles as Nanosphere Chains

7th IADR Iranian Division Annual Meeting, Date: 2012,

13. Degree of conversion of nano- and micro-hybrid resin composites cured by different light sources

Annual Meeting of Academy of Dental Materials Congress

Location: Trieste , Italy, Date: 2010

Authors: T.S. Jafarzadeh Kashi, H. Bagheri G, M. Behroozibakhsh, S.M.Fatemi,
Y. Rezaei

Type : Poster Presentation, Lecturer,

14. The Effect of Temperature on the Efficacy of Polymerization of a Dental Resin Composite

Annual Meeting of Academy of Dental Materials Congress

Location: Trieste , Italy, Date: 2010

Authors: T.S. Jafarzadeh Kashi, M. Behroozibakhsh, S.M. Fatemi, M.Erfan, H. Bagheri

G

Type : Poster Presentation & Abstract, Lecturer,

15. Usage of Calcium Phosphates Cements in Oral Tissue Engineering

3rd National Congress of The Iranian Post-Graduate Dental Students,

2011Authors: S.M.Fatemi., M. Behroozibakhsh

Type : Abstract, Lecturer,

16. Repair of Enamel Microcavities with Novel Nanomaterials

11th Congress of Iranian Academy of Restorative Dentistry, 2011.

Authors: M. Behroozibakhsh, F. Shafiei

Type: Oral Presentation, Lecturer,

17. Biomimetic Nanomaterials in Preventive Dentistry

51th Annual International Congress of Iranian Dental Association:

2011-Authors: M Behroozibakhsh, Type: Oral Presentation, Lecturer,

18. Future of Dental Resin Composites

50th Annual International Congress of Iranian Dental Association,

Date: 2010-Authors: M. Behroozibakhsh, H. Bagheri, G. Type : Oral Presentation, Lecturer,

19. Principles Steps in Dentin Bonding Formulations :Points and Methods

50th Annual International Congress of Iranian Dental Association Date: 2010-

Authors: S.M. Fatemi, T.S. Jafarzadeh Kashi, M. Behroozibakhsh

Type : Abstract, Lecturer,

20. Evaluation of surface treatments on composite repair strengths using Clearfil repair system

20th European Dental Materials Conference

Location: Manchester, UK, Date: 2009

Authors: T.S. Jafarzadeh Kashi, M. Erfan, M. Behroozibakhsh, S. Eskandarion, N. Aghabygi

Type : Poster Presentation & Abstract, Lecturer,

21. Degree of Conversion of Three Different Composites

20th European Dental Materials Conference, Location: Manchester, UK,.

Date: 27 Aug 2009-28 Aug 2009

Authors: T.S. Jafarzadeh Kashi, M. Behroozibakhsh, S.M. Fatemi, M. Erfan, S.N. Chegini

Type : Poster Presentation, Lecturer,

22. Effect of Temperature on Depth of Cure of a Resin Composite Cured by LED and QTH

48th Annual International Congress of Iranian Dental Association

Location: Tehran/Iran, Date: 2008-Authors: M. Behroozibakhsh, T.S. Jafarzadeh Kashi

Type: Oral Presentation, Lecturer,

Skills and Expertise

1. Material Characterization

1.1 X-ray Crystallography, X-Ray Diffraction, (Expert high Score Software)

Expert

1.2 Fourier-transform infrared spectroscopy (FT-IR) (Omnicon software)

Expert

1.3 Mechanical properties using Universal Testing Machine SEM

Expert for evaluation of different mechanical properties

1.4 Scanning electron microscope (SEM)

1.5 Transmission electron microscopy (TEM)

1.6 Simultaneous Thermal Analysis (STA)

1.7 Atomic Force Microscopy (AFM),

1.8 Optical Coherence Tomography (OCT) ,

1.9 Micro-CT

2. Statistical analysis using SPSS software.

3. Weibull analysis

Ongoing Projects

1. Influence of enamel crystalline structure on the enamel resistance to demineralization
2. Synthesis and characterization of a Zinc-Based Metal Organic Frameworks (Zn-MOF) for improvement of antibacterial properties of an experimental resin infiltrant