

Curriculum Vita

Elnaz Tamjid, PhD

Associate Professor

Department of Nanobiotechnology

Faculty of Biological Sciences

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Education

- **Ph.D.:** Nanoscience and Nanotechnology (2006-2011), Institute for Nanoscience and Nanotechnology, Sharif University of Technology, Tehran, Iran
Thesis: Bioactivity and kinetics of tissue growth in Poly(ϵ -Caprolactone)/Bioglass/TiO₂ nanocomposite scaffolds with controlled pore structure produced by the 3D Printing process
- **MSc.:** Materials Science and Engineering (2003-2005), Department of Materials Science and Engineering, Sharif University of Technology, Tehran, Iran
Thesis: An investigation on the thixoforming and workability of 7075 aluminum alloy
- **BSc.** in Materials Science and Engineering (1998-2003), Department of Materials Science and Engineering, Sharif University of Technology, Tehran, Iran
Thesis: A Study on fatigue properties of metal forming risers: Experimental and simulation

Honors and Awards

- “Distinguished Researcher”, Deputy of Research and Technology, Tarbiat Modares University, 2022-2023
- “Erasmus+” Mobility Grant (Teaching/Research), European Commission, 2019-2023
- “Nanoprototype” Competition Winner, Start-up Research Grant (Young Scientists), National Nanotechnology Initiative Council, 2014
- “Incubator” Postdoctoral Fellowship, National Nanotechnology Initiative Council, 2012-2013
- First rank Ph.D. graduate with the best degree, Institute for Nanoscience and Nanotechnology, Awarded by the President of Sharif University of Technology, 2012
- Hot Paper published in Nanomedicine: Nanotechnology, Biology and Medicine, 2011-2012
- Highlighted oral presentation in Euro BioMat 2011, Jena, Germany

- Nanotechnology Research Grant, Iranian Nanotechnology Initiative Council, 2008 and 2011
- Exceptional Talents Award, Exceptional talents office, Dean of graduate studies, Sharif University of Technology, 2008 and 2009
- 5th Khwarizmi Student Award (the highest national science award), 1998, Ministry of Science and Education, Iran

Research Interest

3D Bioprinting; Tissue Engineering; Drug Delivery, Cell Imaging; Cell Tracking

Work Experience

Associate Professor

- Since January 2020: Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, Tehran, Iran

Adjunct Faculty Member

- Since September 2015: Department of Biomaterials, Faculty of Interdisciplinary Sciences and Technology, Tarbiat Modares University, Tehran, Iran

Assistant Professor

- September 2014- December 2019: Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, Tehran, Iran

Postdoctoral Fellow

- Dec. 2012- Apr. 2014: Institute for Biotechnology and Environmental Research, Sharif University of Technology, Tehran, Iran
- Jan.- Sept. 2012: Institute of Biomaterials and Biomedical Engineering (IBBME), University of Toronto, Toronto, Canada

Visiting Researcher

- Oct. 2011- Sept. 2012: Nanostructured Industrial Biomaterials Group, Center for Biocomposites and Biomaterials Processing, University of Toronto, Toronto, Canada
- Sept.- Dec. 2010: Department of Biomaterials, Max-Planck Institute of Colloids and Interfaces, Potsdam-Golm, Germany
- July- Sept. 2006 and 2007: Fraunhofer Institute for Manufacturing and Advanced Materials

(IFAM), Bremen, Germany

Granted Projects

- “Development of Silk Fibroin-Oxidized Nanocellulose Bio-ink Containing Fibroblast Cells and Bioactive Glass Nanoparticles for 3D-Printing in Skin Tissue Engineering Applications”, Iran National Science Foundation (INSF), 2021
- “Induction of chondrogenic differentiation using injectable hydrogel containing magnetic nanoparticles”, Iran National Science Foundation (INSF), 2021

Professional Experiences

- Head of Nanobiotechnology Department, Faculty of Biological Sciences, Tarbiat Modares University, Tehran, Iran, 2020-2022
- Co-director of Injectable-hydrogels for cartilage regeneration program, Deputy Office of Research and Technology, Tarbiat Modares University, Since 2021
- Member of the peer-review committee for international joint projects between Ministry of Science, Research and Technology, Iran (MSRT) and Federal Ministry of Education and Research, Germany (BMBF), 2019-2020
- Coordinator of International Affairs at Faculty of Biological Sciences, Tarbiat Modares University, 2018-2022
- Director of “Regenerative Nanomedicine and 3D-bioprinting Lab”, Department of Nanobiotechnology, Tarbiat Modares University, Since 2017
- Member of Bone & Cartilage Scientific Committee, Iranian Council for Stem Cell Sciences and Technologies, 2016-2017
- Adjunct Faculty Member at Institute for Nanoscience and Nanotechnology, Sharif University of Technology, Since 2015

Professional Courses and Workshops

- Sinter-based Additive Manufacturing, Fraunhofer Institute, Germany, 2019
- M4-Holomonitor Live Cell Imaging, Phiab Company, Iran, 2017
- Cytation-3 Cell Imaging Multi-Mode Reader, BioTek Company, Iran, 2016
- Entrepreneurship Training, National Nanotechnology Initiative Council, Iran, 2014
- HPLC Analysis, Pasteur Institute, Iran, 2013

- Amino Acid Analyzer, Sharif University of Technology, Iran, 2013
- ICP-AES Analysis, University of Toronto, Canada, 2012
- TEM Analysis, Mount Sinai Hospital, Toronto, Canada, 2012
- Regenerative Medicine, University of Toronto, Canada, 2012
- Animal Care Module, University of Toronto, Canada, 2012
- Animal Surgery Module, University of Toronto, Canada, 2012
- Laboratory Biosafety Course, University of Toronto, Canada, 2012
- WHMIS Course, University of Toronto, Canada, 2012

Teaching Experience

Graduate courses:

- Characterizations of Nanostructures
- Biomaterials
- Principles of Nanotechnology
- Biodegradation in Physiological Environments
- Surface Science and Engineering in Nanobiotechnology
- Metals and Their Applications in Biomedical Engineering

Undergraduate courses:

- Introduction to Materials Science
- Introduction to Nanotechnology

Supervised Graduate Students

Ph.D. Students:

1. Parisa Nasrollahi, “Sustained release of sodium deoxycholate from PLGA-PEG- PLGA thermosensitive polymer”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2015-2017.
2. Fatemeh Shamekhi, “Synthesis and optimization of Alginate/Chitosan/Liraglutide nanocapsules as an oral medication for diabetes”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2015-2017.
3. Fatemeh Rostami, “Osteogenic effect of electrospun drug-eluting graphene oxide/nanofibrous

composites for bone tissue regeneration”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2016-2020.

4. Nooshin Zandi, “Gelatin based nanofibrous scaffolds containing biomimetic proteoglycan nanoparticles for controlled release of growth factors”, Institute for Nanoscience and Nanotechnology, Sharif University of Technology, 2017-2019.
5. Afsaneh Ehsandoost, “3D-Bioprinting of silk-based porous cell-laden hydrogel scaffolds for wound dressing applications”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2019.
6. Roya Lotfi, “3D-Bioprinting of cell-laden hydrogel scaffolds filled with 2D nanostructures for potential tissue engineering applications”, Institute for Nanoscience and Nanotechnology, Sharif University of Technology, since 2019.
7. Golara Kafili, “3D-Bioprinting of cell-laden hydrogel scaffolds based on human-derived tissues for skin tissue engineering applications”, Institute for Nanoscience and Nanotechnology, Sharif University of Technology, since 2019.
8. Parvin Najafi, “Cartilage tissue repair using injectable hydrogels containing magnetic nanoparticles”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2020.
9. Zahra Rahimzadeh, “Smart nanosystems for controlled release of glucose”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2022.

Masters Students:

1. Amir Azarniya, “Surface modification of electrospun keratin/bacterial cellulose nanofibers using drug-eluting temperature-sensitive smart hydrogel nanocomposites for skin tissue engineering”, Department of Materials Science and Engineering, Sharif University of Technology, 2015-2016.
2. Shadi Marzoughi, “Solid freeform fabrication of polymer-based nanocomposite scaffolds for articular cartilage tissue engineering”, Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.
3. Mahsa Bohlouli, “Fabrication of a three-dimensional drug-eluting nanocomposite scaffold by 3D-printing for bone regeneration”, Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.

4. Masoud Rezaei, "Surface modification of titanium implants using severe plastic deformation (SPD)", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.
5. Elnaz Saeedi, "Preparation and evaluation of anti-cancer effects of liposomal doxorubicin-graphene oxide nanosystem with the usage of photothermal therapy in vitro", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.
6. Samira Tajvar, "Preparation and evaluation of anti-cancer effects of liposomal doxorubicin-graphene dot nanosystem targeted with AS1411 aptamer in vitro", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.
7. Zohreh Panahi, "Development and characterization of biodegradable nanocomposite coatings on orthopedic implants by electrospinning method", 2016-2017.
8. Mina Razaghzadeh, "Indirect 3D- printing of silk-based nanocomposite scaffolds for bone tissue engineering", Department of Biotechnology, Faculty of Chemical Engineering, Sharif University of Technology, 2016-2017.
9. Nima Koreie, "An investigation on amount and type of Nanoparticles in Dental composite based on Bis-GMA and achieving Fluoride therapy properties by fluoride Ion release", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2016-2017.
10. Alireza Rezaei, "The Investigation in amount and type of Nano-particles in properties of dental composite based on Bis-GMA and Antibacterial effect of Ag Nanoparticles of composites", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2016-2017.
11. Taraneh Peimaneh Abedi Mohtasab, "Biofilm formation, antibacterial properties and cell viability of PCL-based electrospun nanofibrous composite scaffolds for wound dressing", Department of Microbial Biotechnology, Tehran Shargh, Payam Noor University, 2017-2018.
12. Kimia Rafiei (MSc), "Surface modification of Ti6Al4V alloy by Nd-YAG laser for improving the biological properties", Department of Materials Science and Engineering, Faculty of Engineering, Tarbiat Modares University, 2017-2018.
13. Nooshin Nadi, "Synthesis and characterization of fluorescent graphene quantum dot/chitosan

- hybrid nanosystem for in vitro mesenchymal stem cell tracking”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2017-2018.
14. Behnoosh Samavati, “A study on properties and biological behavior of biomolecule- loaded PCL based nanocomposite scaffolds produced by 3D printing”, Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2017-2018.
 15. Hossein Alipour, “Coaxial electrospinning of PCL/PEO Nanofibers containing herbal extract for wound healing applications”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2018-2019.
 16. Mohammad Khalili, “Effect of metal-organic framework (MOF) coatings on corrosion control of AZ91 magnesium implant”, Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2018-2019.
 17. Hosna-Hadavi, “Investigation of the in vitro corrosion behavior and biological properties of magnesium-calcium alloy with polycaprolactone nanofibrous coating”, Department of Materials science and Technology, Tehran University, 2019-2020.
 18. Faezeh Shahedi, “Silk-based porous biocomposite hydrogels for cartilage regeneration applications”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2019-2021.
 19. Negar Shokouhnejad, “Preparation and characterization of desensitizing gel based on bioactive glass and bioactive peptides”, Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2019-2021.
 20. Mahsa Karimi, “3D-Printed PCL/Collagen scaffolds for Guided Bone Regeneration (GBR) applications”, Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2019-2021.
 21. Elaheh Bazzazadeh, “3D Printing and characterization of PCL/Nanodiamond composite scaffolds for bone tissue engineering applications”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2020-2022.
 22. Salman Ahmadi, “Chitosan-based electrospun coatings containing herbal extract for antibacterial textile applications”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2020-2022.
 23. Nafiseh Sepahdoost, “Quercetin loaded nano-emulsion system for BBB drug delivery”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares

University, since 2021-2023.

24. Fatemeh Jabbari Mehrabani, “3D printed microneedle transdermal patches for Tetracycline hydrochloride drug-delivery”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2021.
25. Maedeh Sanei, “Aloevera extract-loaded Electrospun nanofibers for wound healing applications”, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2021.

Member of Editorial Board of Peer-reviewed Journals

- Scientific Reports, “Biological Physics” section, Nature publishers, Since May 2018
- International Journal of Applied Tissue Engineering, “Biomaterials” section, ISS (online): 2383-3149, Since January 2018

Professional Peer Review

- ACS Applied Materials & Interfaces
- Nanoscale Research Letters (NRL), Springer
- Scientia Nanotechnology, Elsevier
- Materials Letters, Elsevier
- Powder Technology, Elsevier
- Journal of Materials Engineering and Performance (JMPEP), Springer
- Journal of Biomaterials Applications (JBA), SAGE
- International Journal of Nanoscience and Nanotechnology (IJNN)
- Iranian Journal of Biotechnology (IJB)
- Journal of Iranian Biology Society
- Journal of Biotechnology Tarbiat Modares University (BIOT)
- International Conference on Nanostructures (ICNS)
- International Conference on Materials Engineering and Metallurgy (iMAT)

Publications

Peer-reviewed Journals

1. *E. Tamjid, P. Najafi, M. Khalili, N. Shokouhnezhad, M. Karimi, N. Sepahdoost, E. Bazzazzadeh, S. Ahmadi, “Dielectric, Thermal, and Electrical Conductivity Studies of Biodegradable Polymer*

Nanocomposites” Polymer Reviews (under review).

2. G. Kafili, **E. Tamjid**, H. Niknezhad, A. Simchi, “Effect of Pepsin Digestion Time on The Properties of Temperature Sensitive Human Amniotic Membrane Derived Hydrogel”, *Modares Journal of Biotechnology (under publication)*.
3. G. Kafili, **E. Tamjid**, H. Niknejad, A. Simchi, Development of injectable hydrogels based on human amniotic membrane and polyethyleneglycol-modified nanosilicates for tissue engineering applications, *European Polymer Journal* 179, 111566.
4. M. Saeidi, MA Amidian, S. Sheybanikashani, H. Mahdavi, H. Alimohammadi, L. Syedmoradi, F. Mohandes, A. Zarrabi, **E. Tamjid**, K. Omidfar, A. Simchi, “Multilayered Mesoporous Composite Nanostructures for Highly Sensitive Label-Free Quantification of Cardiac Troponin-I”, *Biosensors* 12 (2022) 337.
5. **E. Tamjid**, S. Marzooghi, P. Najafi, M. Behmanesh, “Three-dimensional gradient porous polymeric composites for osteochondral regeneration”, *Journal of Polymer Research*, 29 (2022) 1-7.
6. SH Hadavi, R Soltani, **E Tamjid**, R Mehdiavaz Aghdam, “In vitro Corrosion Behavior and Biological Properties of Magnesium-Zinc-Calcium Alloy Coated with Polycaprolactone Nanofibers”, *Journal of Ultrafine Grained and Nanostructured Materials* 54 (2021) 93-100.
7. MA Khalili, **E. Tamjid**, “Controlled biodegradation of magnesium alloy in the physiological environment by metal-organic framework nanocomposite coatings”, *Scientific Reports* 11 (2021) 1-13.
8. N. Zandi, B. Dolatyar, R. Lotfi, Y. Shallageh, MA Shokrgozar, **E. Tamjid**, N. Annabi, A. Simchi, “Biomimetic nanoengineered scaffold for enhanced full-thickness cutaneous wound healing”, *Acta Biomaterialia* 124 (2021) 191-204.
9. R. Rahmati, A. Hemmati, R. Mohammadi, A. Hatami, **E. Tamjid**, A. Simchi, “Sensitive voltammetric detection of melatonin in pharmaceutical products by highly conductive porous graphene-gold composites”, *ASC Sustainable Chemistry and Engineering* 8 (2020) 18224-18236.
10. N. Zandi, E. Shirzaei Sani, E. Mostafavi, D. M Ibrahim, B. Saleh, M. A. Shokrgozar, **E. Tamjid**, P. S Weiss, A. Simchi, N. Annabi, “Nanoengineered shear-thinning and bio-printable hydrogel as a versatile platform for biomedical applications”, *Biomaterials* (2020) 120476.
11. **E. Tamjid**, M. Bohlouli, S. Mohammadi, H. Alipour, M. Nikkhah, “Sustainable drug release from highly porous and architecturally engineered composite scaffolds prepared by 3D printing”, *Journal of Biomedical Materials Research Part A* 108 (2020) 1426-1438.
12. F Rostami, **E Tamjid**, M Behmanesh, “Drug-eluting PCL/graphene oxide nanocomposite scaffolds for enhanced osteogenic differentiation of mesenchymal stem cells”, *Materials Science and Engineering: C* (2020) 111102.
13. K Rafiee, H Naffakh-Moosavy, **E Tamjid**, “The effect of laser frequency on roughness, microstructure, cell viability and attachment of Ti6Al4V alloy”, *Materials Science and Engineering: C* 109 (2020) 110637.
14. Z. Panahi, **E. Tamjid**, M. Rezaei, “Electrospinning coating of polycaprolactone/bioactive Glass Nanocomposites on a Biodegradable Magnesium Alloy for Enhanced cytocompatibility and reduced corrosion rate in physiological environments”, *Surface & Coating Technology* 386 (2020) 125461.

15. N. Zandi, **E. Tamjid**, M. Shokrgozar, A. Simchi, "Electrospinning of concentrated and crosslinked Gelatin by Maillard reaction for fabrication of tissue engineering scaffolds", *Nanomaterials* 12 (2020) 33-41 (in Persian).
16. M. Bohlouli, **E. Tamjid**, S. Mohammadi, M. Nikkhah, "A study on cytotoxicity, hemocompatibility, and antibacterial properties of tetracycline hydrochloride-loaded PCL-based composite scaffolds for bone tissue engineering applications", *Journal of Biotechnology*, 11 (2020) 61-69 (in Persian).
17. N Zandi, R Lotfi, **E Tamjid**, MA Shokrgozar, A Simchi, "Core-sheath gelatin-based electrospun nanofibers for dual delivery release of biomolecules and therapeutics", *Materials Science and Engineering: C* 108 (2020) 110432.
18. N. Zandi, E. Mostafavi, M. Shokrgozar, **E. Tamjid**, T. Webster, N. Annabi, A. Simchi, "Biomimetic proteoglycan nanoparticles for growth factor immobilization and delivery", *Biomaterials Science* 8 (2020)1127-1136.
19. A Azarniya, **E Tamjid**, N Eslahi, A Simchi, "Modification of bacterial cellulose/keratin nanofibrous mats by a tragacanth gum-conjugated hydrogel for wound healing", *International Journal of biological macromolecules* 134 (2019) 280-289.
20. M. Razzaghzadeh Bidgoli, M. Khafaji, **E. Tamjid**, I. Alemzadeh, M. Vossoughi, "Fabrication of hierarchically porous silk fibroin-bioactive glass composite scaffold via indirect 3D printing: Effect of particle size on physicommechanical properties and in vitro cellular behavior", *Materials Science and Engineering C* 103 (2019) 109688.
21. T. P. Abedi Mohtasab, **E. Tamjid**, R. Haji-Hosseini, "A study on biofilm formation, antibacterial properties and cell viability of Poly(ϵ -caprolactone)-based electrospun nanofibrous scaffold", *Journal of Biotechnology*, 10 (2019) 373-380 (in Persian).
22. S. Tajvar, S. Mohammadi, A. Askari, S. Janfaza, M. Nikkhah, **E. Tamjid**, S. Hosseinkhani, "Preparation of liposomal doxorubicin-graphene nanosheet and evaluation of its in vitro anti-cancer effects", *Journal of liposome research* 29 (2019) 163-170.
23. **E. Tamjid**, "Three-dimensional polycaprolactone-bioactive glass composite scaffolds: Effect of particle size and volume fraction on mechanical properties and in vitro cellular behavior", *International Journal of Polymeric Materials and Polymeric Biomaterials* 67 (2018) 1005–1015.
24. F. Shamekhi, **E. Tamjid**, K. Khajeh, "Development of chitosan-modified calcium-alginate nanocapsules for oral delivery of liraglutide to diabetic patients", *International Journal of biological macromolecules* 120 (2018) 460-467.
25. P. Nasrollahi, K. Khajeh, **E. Tamjid**, M. Taleb, M. Soleimani, G. Nie, "Sustained release of sodium deoxycholate from PLGA-PEG-PLGA thermosensitive polymer", *Journal of Artificial Cells, Nanomedicine, and Biotechnology (IANB)* 46 (2018) 1170-1177.
26. **E. Tamjid**, M. Rezaei, Y. Akhtari, A. Ehsandoost, B. Samavati, "A review on total hip joint arthroplasty (THA): Prosthesis design and clinical trials", *Journal of Applied Tissue Engineering* 5 (2018), 7-25.
27. R. Ghaffari, N. Eslahi, **E. Tamjid**, A. Simchi, "Dual-sensitive hydrogel nanoparticles based on conjugated thermoresponsive copolymers and protein filaments for triggerable drug delivery", *ACS Applied Materials & Interfaces* 10 (2018) 19336–19346.

28. M. Rezaei, **E. Tamjid**, A. Dinari, "Enhanced cell attachment and hemocompatibility of titanium implants by nanoscale surface modification through severe plastic integration of magnesium-rich islands and porosification", *Scientific Reports* 7 (2017) 12965.
29. M. Ayoubi, P. Naserzadeh, M.T. Hashemi, M.R. Rostami, **E. Tamjid**, M.M. Tavakoli, A. Simchi, "Biochemical Mechanisms of dose-dependent cytotoxicity and ROS-mediated apoptosis induced by lead sulfide/graphene oxide quantum dots for potential bioimaging applications", *Scientific Reports*, 7 (2017) 12896.
30. A. Dinari, **E. Tamjid**, "Recent progress in upgrading optical microscopy resolution: an opening into biological observations at the nanoscale", *Journal of Biosafety* 10 (2017), 109-129.
31. A. Nojoomi, **E. Tamjid**, A. Simchi, S. Bonakdar, P. Stroeve, "Injectable Polyethylene Glycol-Laponite Composite Hydrogels as Articular Cartilage Scaffolds with Superior Mechanical and Rheological Properties", *International Journal of Polymeric Materials and Polymeric Biomaterials* 66 (2017) 105-114.
32. M. Mazaheri, N. Eslahi, F. Ordikhani, **E. Tamjid**, A. Simchi, "Nanomedicine applications in orthopedic medicine: state of the art", *International Journal of Nanomedicine* 10 (2015), 6039- 6054.
33. **E. Tamjid**, A. Simchi, "Fabrication of a highly ordered hierarchically designed porous nanocomposite via indirect 3D printing: Mechanical and cellular response", *Journal of Materials and Design* 88 (2015) 924-931.
34. F. Ordikhani, M. Ramezani Farani, M. Dehghani, **E. Tamjid**, A. Simchi, "Physicochemical and biological properties of electrodeposited graphene oxide/chitosan films with drug-eluting capacity", *Carbon* 84 (2015) 91-102.
35. F. Ostadhossein, N. Mahmoudi, G. Morales-Cid, **E. Tamjid**, F.J. Navas-Martos, B. Soriano-Cuadrado, J.M. Lopez Paniza, A. Simchi, Ph.D., "Development of chitosan/bacterial cellulose composite films containing nanodiamonds as a flexible platform for wound dressing", *Materials* 8 (2015) 6401-6418
36. F. Ordikhani, A. Simchi, **E. Tamjid**, "Characterization and antibacterial performance of electrodeposited chitosan–vancomycin composite coatings for prevention of implant-associated infections", *Materials Science and Engineering C*, 1 (2014) 41:240–248.
37. **E. Tamjid**, A. Simchi, J.W.C. Dunlop, P. Fratzl, R. Bagheri, M. Vossoughi, "Tissue growth into three-dimensional composite scaffolds with controlled micro-features and nanotopographical surfaces", *Journal of Biomedical Materials Research A*, 101 (2013) 2796-2807.
38. M. Mansorianfar, M.A. Shokrgozar, M. Mehrjoo, **E. Tamjid**, A. Simchi, "Nanodiamonds for surface engineering of orthopedic implants: Enhanced biocompatibility in human osteosarcoma cell culture", *Diamond & Related Materials* 40 (2013) 107–114.
39. **E. Tamjid**, A. Simchi, R. Bagheri, M. Vossoughi, "Kinetics of Tissue Growth In 3d Polymer-based Nanocomposite Scaffolds", *Artificial Organs* 37 (2013), A49.
40. A. Simchi, **E. Tamjid**, F. Pishbin, A.R. Boccaccini, "Recent progress in inorganic and composite coatings with bactericidal capability for orthopedic applications", *Nanomedicine*:

Nanotechnology, Biology and Medicine, 7 (2011) 22-39.

41. **E. Tamjid**, R. Bagheri, M. Vossoughi A. Simchi, "Effect of particle size on the in vitro bioactivity, hydrophilicity and mechanical properties of bioactive glass-reinforced PCL composites", *Journal of Materials Science and Engineering C*, 31 (2011) 1526-1533.
42. **E. Tamjid**, R. Bagheri, M. Vossoughi A. Simchi, "Effect of TiO₂ morphology on the in vitro bioactivity and mechanical properties of polycaprolactone/TiO₂ nanocomposites for tissue engineering", *Materials Letters*, 65 (2011) 2530-2533.
43. **E. Tamjid**, Bernd H. Guenther, "Rheology and colloidal structure of silver nanoparticles dispersed in diethylene glycol", *Powder Technology* 197 (2010) 49-53.
44. **E. Tamjid**, Bernd H. Guenther, "Study of rheology and sedimentation properties of silver nanoparticles dispersed in ethylene glycol", *Int. J. of Nanomanufacturing*, 5 (2009) 383-392
45. M. Dourandish, A. Simchi, **E. Tamjid Shabestary**, T. Hartwig, "Co-sintering of zirconia-stainless steels for fabrication of functionally graded composite layers", *Journal of the American Ceramic Society*, 91 (2008) 3493-3503.

International Conferences

1. M. Khalili, **E. Tamjid**, "Metal-organic framework (MOF) coatings on AZ91 magnesium implants for biodegradation control in physiological environments", 8th International Color & Coating Congress, 13-14 October 2021, Tehran, Iran.
2. F. Shahedi, **E. Tamjid**, "Rheology evaluation of Gelatin/Alginate/Laponite nanocomposite hydrogel for tissue engineering applications", 5th International Congress on Biomedicine (ICB), 10-19 November 2021, Tehran, Iran.
3. G. Kafili, **E. Tamjid**, H. Niknezhad, A. Simchi, "Gelation kinetics of nanostructured human amniotic membrane-derived hydrogel", ANM2021, 22-24 July 2021, Aveiro, Portugal.
4. G. Kafili, **E. Tamjid**, H. Niknezhad, A. Simchi, "Processing of a temperature-responsive human amniotic membrane-derived hydrogel for soft tissue engineering by 3D bioprinting", 14th International Seminar on Polymer Science and Technology (ISPST), 9-12 November 2020, Tehran, Iran.
5. G. Kafili, **E. Tamjid**, H. Niknejad, A. Simchi, "Rheological behavior of amniotic membrane-based hydrogel containing Laponite nanoparticles", 8th International Conference on Nanostructures (ICNS8), 18-20 November 2020, Tehran, Iran.
6. A. Ehsandoost, **E. Tamjid**, "Rheological study of silk fibroin", 14th International Seminar on Polymer Science and Technology (ISPST), 9-12 November 2020, Tehran, Iran.
7. B. Samavati, **E. Tamjid**, O. Cheraghi, K. Khajeh, "Osteogenic effect of PDA-coated 3D printed nanocomposite scaffolds, ICNS8, 18-20 November 2020, Tehran, Iran.
8. H. Alipour, **E. Tamjid**, "Coaxial electrospinning of PCL/PEO Nanofibers containing *Medicago sativa* extract for wound healing applications", 20th European Materials Science Conference, 16-17 Sep 2019, Amsterdam, Netherlands.
9. **E. Tamjid**, T.P. Abedi Mohtsab, "An in vitro Study on Antibacterial and Anticancer Properties of Electrospun Nanofibrous Polycaprolacton-based scaffolds", 1st International Iranian Tissue

Engineering and Regenerative Medicine Congress (ITERMC), 18-20 July 2018, Tehran, Iran.

10. K. Rafiee, H. N. Mousavi, **E. Tamjid**, “MG-63 Cell Behaviour on Ti6Al4V Implant Surface Modified by NdYAG Laser”, *1st International Iranian Tissue Engineering and Regenerative Medicine Congress (ITERMC), 18-20 July 2018, Tehran, Iran.*
11. K. Rafiee, H. N. Mousavi, **E. Tamjid**, “Effect of Nd-YAG Pulsed laser Frequency on Surface properties of Ti6Al4 in Biomedical Applications”, *7th international conference on materials engineering and metallurgy, 9-10 Oct 2018, Tehran, Iran.*
12. **E. Tamjid**, A. Azarnia, N. Eslahi, A. Simchi, “Physicomechanical Properties and in vitro Biological Performance of Keratin/Bacterial Cellulose Nanofibrous Composites for Wound Dressing”, *CARBON 2018, 1-6 July 2018, Madrid, Spain.*
13. **E. Tamjid**, N. Mahmoudi, A. Simchi, “Effect of Graphene Oxide Nanosheets on Physicomechanical and in vivo Biological Performance of Electrospun Polymeric Nanofibers”, *CARBON 2018, 1-6 July 2018, Madrid, Spain.*
14. **E. Tamjid**, M. Bohlouli, M. Nikkhah, “Fabrication of drug-eluting nanocomposite scaffolds for tissue engineering applications using 3D printing”, *EMN 2017, 4-8 Dec 2017, Orlando, USA.*
15. Mina Razzaghzadeh Bidgoli, Manouchehr Vossoughi, Iran Alemzadeh, **Elnaz Tamjid**, Dina Dorri, “Design and Fabrication of Hierarchically porous composite scaffold for Bone Regeneration”, *2nd Nanomedicine and Nanosafety International Conference (NMNS 2017), 29-30 Nov 2017, Tehran, Iran.*
16. **E. Tamjid**, M. Rezaei, A. Dinari, Z. Panahi, “Improved bioactivity of titanium implants by nano-scale magnesium-rich islands”, *7th International Conference on Nanostructures (ICNS7), 27 Feb-1 March 2018, Tehran, Iran.*
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