Elnaz Tamjid, PhD

Assistant Professor, and Head of Nanobiotechnology Department,

Faculty of Biological Sciences, Tarbiat Modares University, Tehran, Iran

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Education

PhD. in 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 3D-Printing process

M.Sc. in 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

B.Sc. 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

- "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 PhD graduate with highest 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

- Development of hydrogel based bioinks for 3D-bioprinting and additive manufacturing
- Synthesis and biological characterization of nanomaterials for biomedical applications

Work Experience

Tenure-track Assistant Professor

Since September 2014: 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

Professional Experiences

- Member of 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), Since 2019
- Member of the Board, "Nano-Maham" startup Company, Since 2018
- Coordinator of International Affairs at Faculty of Biological Sciences, Tarbiat Modares University, Since 2018
- 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, Since 2016
- Cross-Appointed Faculty Member at Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, Since 2015
- Adjunct Faculty Member at Institute for Nanoscienece 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

Taught courses for PhD students

1. Principles of Nanotechnology

2. Characterizations of Nanostructures

Taught courses for M.Sc. students

- 1. Biomaterials (MSc);
- 2. Principles of Nanotechnology (MSc);
- 3. Biodegradation in Physiological Environments, (MSc);
- 4. Surface Science and Engineering in Nanobiotechnology, (MSc);
- 5. Metals and Their Applications in Biomedical Engineering, (MSc);

Supervised and Advised Graduate Students

PhD students:

- 1. Parisa Nasrollahi (PhD), "Sustained release of sodium deoxycholate from PLGA-PEG-PLGA thermosensitive polymer", Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, 2015-2017.
- Fatemeh Shamekhi (PhD), "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.
- Fatemeh Rostami (PhD), "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 (PhD), "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 (PhD), "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 (PhD), "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 rapair using injectable hydrogels containing magnetic

nanoparticles, Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2020.

Masters Students:

- 1. Amir Azarniya (MSc), "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 (MSc), "Solid free form 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 (MSc), "Fabrication of a three dimensional drug-eluting nanocamposite scaffold by 3D-printing for bone regeneration", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.
- 4. Masoud Rezaei (MSc), "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 (MSc), "Preparation and evaluation of anti-cancer effects of liposomal doxorubicin- graphene oxide nanosystem with usage of photothermal therapy in vitro", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2015-2016.
- 6. Samira Tajvar (MSc), "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 (MSc), "Development and characterization of biodegradable nanocomposite coatings on orthopedic implants by electrospinning method", 2016-2017.
- 8. Mina Razaghzadeh (MSc), "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 (MSc), "An investigation on amount and type of Nano-particles 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 (MSc), "The Investigation in amount and type of Nano-particles in properties of dental composite based on Bis-GMA and Antibacterial effect of Ag Nano-particles of composites", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, 2016-2017.
- 11. Taraneh Peimaneh Abedi Mohtasab (MSc), "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 (MSc), "Synthesis and characterization of flourescent 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 (MSc), "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 (MSc), "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. Faezeh Shahedi (MSc.), "Silk-based porous biocomposite hydrogels for cartilage regeneration applications", Department of Nanobiotechnology, Faculty of Biological Sciences, Tarbiat Modares University, since 2019.
- 18. Zohreh Arabi (MSc.), "Cell laden Silk-based porous biocomposite hydrogels", Faculty of Biological Sciences, Tarbiat Modares University, since 2019.
- 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, since 2019.

20. Sajjad Behnam-Nik, "Effect of nanodiamon coatings on corrosion control of AZ91 magnesium implant", Department of Biomaterials, Faculty of Interdisciplinary Science and Technology, Tarbiat Modares University, since 2020.

Editorial board of Peer-reviewed journals

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

Professional Peer Review

- ACS Applied Materials & Interfaces
- Nanoscale Research Letters (NRL), Springer
- Scientia Nanotechnology, Elsevier
- Powder Technology, Elsevier
- Journal of Materials Engineering and Performance (JMEP), 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**, 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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).
- 6. 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).
- 7. 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.
- 8. 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.
- 9. 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.
- 10. 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 physico-mechanical properties and in vitro cellular behavior", Materials Science and Engineering C 103 (2019) 109688.
- 11. 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).
- 12. 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.
- 13. **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
- 14. F. Shamekhi, **E. Tamjid**, K. Khajeh, "Development of chitosan coated calcium-alginate nanocapsules for oral delivery of liraglutide to diabetic patients", International journal of biological macromolecules 120 (2018) 460-467.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. 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.
- 21. 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
- 22. 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.
- 23. 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.
- 24. F. Ordikhani, M. Ramezani Farani, M. Dehghani, E. Tamjid, A. Simchi, "Physicochemical and biological properties of electrodeposited graphene oxide/chitosan films with drugeluting capacity", Carbon 84 (2015) 91-102.
- 25. F. Ostadhossein, N. Mahmoudi, G. Morales-Cid, **E. Tamjid**, F.J. Navas-Martos, B. Soriano-Cuadrado, J.M. Lopez Paniza, A. Simchi, PhD, "Development of chitosan/bacterial cellulose composite films containing nanodiamonds as a flexible platform for wound dressing", Materials 8 (2015) 6401-6418
- 26. 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.
- 27. **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.
- 28. 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.
- 29. E. Tamjid, A. Simchi, R. Bagheri, M. Vossoughi, "Kinetics of Tissue Growth In 3d Polymer-based Nanocomposite Scaffolds", Artificial Organs 37 (2013), A49.
- 30. 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.
- 31. 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.
- 32. 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.
- 33. **E. Tamjid**, Bernd H. Guenther, "Rheology and colloidal structure of silver nanoparticles dispersed in diethylene glycol", Powder Technology 197 (2010) 49-53.
- 34. 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
- 35. 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. B. Samavati, **E. Tamjid**, O. Cheraghi, K. Khajeh, "Osteogenic effect of PDA-coated 3D printed nanocomposite scaffolds, ICNS8, 20-22 Oct 2020, Tehran, Iran.
- 2. 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.
- 3. **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.
- 4. 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.
- 5. 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.
- 6. **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.
- 7. **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.
- 8. **E. Tamjid**, M.Bohlouli, M. Nikkhah, "Fabrication of drug-eluting nanocamposite scaffolds for tissue engineering applications using 3D printing", EMN 2017, 4-8 Dec 2017, Orlando, USA.
- 9. 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.
- 10. **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.
- 11. **E. Tamjid**, Z. Panahi, M. Rezaei, "A study on Biocompatibility of electrospun PCL/BG Nanofibrous composite coatings on magnesium-based implants", 2_{nd} Nanomedicine and Nanosafety International Conference (NMNS 2017), 29-30 Nov, 2017, Tehran, Iran.
- 12. M. Rezaei, A. Dinari, **E. Tamjid**, "Nanostructured bioactive surface modification of titanium implants using friction stir processing (FSP)", 5th International Conference on Materials Engineering and Metallurgy (5th iMAT), 8-9 November 2016, Shiraz, Iran.
- 13. **E. Tamjid**, "In vivo tracking of human umbilical cord perivascular cells (HUCPVCs) by plasmonic quantum dot hybrid structures", ICNS6, 7-10 March 2016, Kish Island, Iran.
- 14. M. Ayoubi, M.T. Hashemi, M.R. Rostami, M.M. Tavakoli, **E. Tamjid**, A. Simchi, "In vitro toxicity assay of quasi core-shell quantum dot-graphene nanocrystals", ICNS6, 7-10 March 2016, Kish Island, Iran.
- 15. **E. Tamjid**, R. Bagheri, M. Vossoughi, A. Simchi, "Bioactivity and tissue growth kinetics of 3D nanocomposite scaffolds: Effect of titania nanoparticles on cell proliferation and differentiation", IMES 2012, 6-8 November 2012, Technical Faculty of Tehran University, Tehran, Iran.
- 16. E. Tamjid, A. Simchi, K.P. Kommareddy, J. Dunlop, R. Bagheri, M. Vossoughi, P. Fratzl, "In vitro tissue growth in three-dimensional scaffolds of PCL-TiO2 nanocomposite prepared by an indirect 3D printing process", Euro BioMat 2011, 12-14 April 2011, Jena, Germany (Highlighted presentation).
- 17. **E. Tamjid**, A. Simchi, R. Bagheri, M. Vossoughi, "Effect of bioglass particle size on the in vitro bioactivity of polycaprolactone/bioglass composite scaffolds", 14th European Conference on Composite Materials (ECCM14), 7-10 June 2010, Budapest, Hungary.
- 18. E. Tamjid, R. Bagheri, M. Vossoughi, A. Simchi, "Effect of titania nanoparticles morphology on the bioactivity of PCL-based composite scaffolds used for tissue engineering", NMC3-

- IUMS, 23-25 February 2010, Iran University of Medical Sciences, Tehran, Iran
- 19. **E. Tamjid**, R. Bagheri, M. Vossoughi, A. Simchi, "Shape-controlled synthesis of TiO₂ nanostructures", 3rd Conference on nanostructures (NS2010), 10-12 March 2010, Kish Island, Iran.
- 20. **E. Tamjid**, Bernd. H. Guenther, "Rheological investigation of silver colloids based on ethylene glycol", 2nd Conference on nanostructures (NS2008), 11-14 March 2008, Kish Island, Iran.
- 21. **E. Tamjid**, A. Simchi, T. Hartwig, "Co-sintering of nanoscaled zirconia powder to stainless steels for manufacturing functionally graded composite layers", 1st International Congress on Nanoscience and Nanotechnology (ICNN 2006), 18-20 December 2006, Technical Faculty of Tehran University, Tehran, Iran.
- 22. **E. Tamjid**, A. Karimi Taheri, "Prediction of semi-solid backward extrusion force using an upper bound analysis", 3rd congress of Iran material and metal forming, 8-10 May 2006, Technical Faculty of Tehran University, Tehran, Iran.
- 23. E. Tamjid, A. Karimi Taheri, "An investigation on the microstructure and mechanical properties of thixoforming ingots produced using a combination of cooling slope technique and vibration", COM 2005, 44th conference of metallurgists, 21-24 August 2005, Alberta, Canada.
- 24. F. Khomamizadeh, P. Sepehrband, E. Tamjid, N. Yazdani, "Study of microstructure and composition of intermetallic phases in A319 alloy", 7th Annual congress of the Iranian metallurgy association, 13-15 October 2003, Sharif University of Technology, Tehran, Iran.
- 25. F. Khomamizadeh, P. Sepehrband, E. Tamjid, N. Yazdani, "Study of the microstructure and mechanical properties of A319 aluminum alloy", 15th Annual Congress of IFS, 10-11 June 2003, Technical Faculty of Tehran University, Tehran, Iran.

Patents

• Iran Patent #97309, T.P. Abedi Mohtasab, **E. Tamjid**, R. Haji-Hosseini, M.H. Yazdi, "PCL-based Selenium nanoparticle infused nanofibrous nanocomposite wound dressing", Iranian Research Organization for Science and Technology, Dec 3, 2018.