PAMELA MOZETIC - curriculum vitae et studiorum

PERSONAL DATA

NAME PAMELA MOZETIC

DATE OF BIRTH December 9, 1979

NATIONALITY ITALIAN

ADDRESS Via Capestrano, 31 00132 Rome, Italy

TELEPHONE +39 3478915354

E-MAIL pamela.mozetic@gmail.com

pamela.mozetic@pec.it

Author ID (Scopus) 23390662600

EDUCATION

April 2007 University of Trieste, Italy

Department of Biochemistry, Biophysics and

Chemistry of Macromolecules

PhD in Biomolecular Sciences. PhD Thesis:

"Osteochondral Tissue engineering: from biomaterials

to cellular response".

Certified number: 2007235829/M33

November 2003 University of Trieste, Italy

Faculty of Medicine

MS degree in Medical Biotechnologies

Thesis: "Molecular Mechanisms involved in the

interaction between chondrocytes and biocompatible

glycopolymers".

Certified number: 2006135656/M329

POST DOCTORAL EXPERIENCE

June 2021 – present San Raffaele Hospital IRCCS - Institute of

Experimental Neurology

Institute of Nanotechnology (NANOTEC) - National

Research Council (CNR)

Research Fellow

Project: "TecnoMED Puglia: Precision Medicine to

Neurodegenerative Disease"

Research topic: "Development of scaffolds and related protocols to induce neural differentiaiton of

iPSCs within BrainOnChips"

March 2020 – March 2021 Institute of Nanotechnology (NANOTEC)

National Research Council (CNR)

Senior Post-Doc Researcher

Project: "TecnoMED Puglia: Precision Medicine to Neurodegenerative Disease"

Research topic: "Development of scaffolds and related protocols to induce neural differentiaiton of iPSCs within BrainOnChips"

February 2018 – January 2020

Center for Translational Medicine (CTM) International Clinical Research Center (ICRC) St. Anne's University Hospital (FNUSA)- Brno Czech Republic

Senior Post-Doc Researcher

Project: "Unveiling the molecular determinants of

aging to design new therapeutics"

Project n.: CZ.02.1.01/0.0/0.0/15_003/0000492

Personal ID: 60428

September 2017-January 2018

University Campus Bio-Medico of Rome, Italy Center for Integrated Research /Faculty of Medicine Research Associate

Project: "Interleukin-8 and Programmed Cell Death Protein-1 Checkpoint in the tumor microenvironment".

September 2015-August 2017

University Campus Bio-Medico of Rome, Italy Center for Integrated Research /Faculty of Medicine Research Associate

Project: "Development of in vitro models obtained by tissue engineering techniques to study tumor microenvironment".

D.R. 172 (03-09-2015) of the "Università Campus Bio-Medico di Roma"

March 2012-August 2015

University Campus Bio-Medico of Rome, Italy Center for Integrated Research/ Faculty of Medicine Principal Investigator, Research Associate Project: "Bioartificial materials and biomimetic scaffolds for a stem cells-based therapy for myocardial regeneration" (grant # RBFR10L0GK). D.R. 147 (07-03-2012) of the "Università Campus Bio-Medico di Roma"

March 2012-August 2015

Principal Investigator of a research project funded by the "Future in Research" scheme, issued by the Italian Ministry for University and Research. Project: "Bioartificial materials and biomimetic

scaffolds for a stem cells-based therapy for myocardial regeneration" (grant no. RBFR10L0GK; overall

project budget: 1,062,000€; grant: 835,620€).

October 2010-September 2011

University Campus Bio-Medico of Rome, Italy Center for Integrated Research/Faculty of Medicine Research Associate

Project: "Towards tissue prototyping: fabrication of patient-specific scaffolds for the regeneration of osteochondral tissue".

D.R. 179 (29-09-2010) of the "Università Campus Bio-Medico di Roma"

January 2009-September 2010

"Fondazione Santa Lucia" and University of Rome "Tor Vergata", Italy

Department of Experimental Medicine and **Biochemical Sciences**

Post Doc Fellowship

Project: "Analysis of endocannabinoid system in mouse and rat brain".

D.R. 215 (20-01-2010) of the "Università di Roma Tor Vergata"

February 2007-December 2008

University of Rome "Tor Vergata", Italy

Department of Chemical Science and Technologies

Post Doc Fellowship

Project: "Evaluation of the bioadhesion and biocompatibility of polymeric microparticles"

D.R. 265 (02-02-2007) of the "Università di Roma Tor Vergata"

September 2005- February 2006

University of Heidelberg-Human Genetic Institute Research Fellowship

"Identification of protein partners of Galectin-1 in a cDNA library of human chondrocytes by Yeast Two-Hybrid System"

GRANTS

2012/2015 MIUR: National FIRB 2010 Project "Bioartificial materials and biomimetic scaffolds for a stem cellsbased therapy for myocardial regeneration" (overall project budget: € 1,062,000; financed amount: € 835,620).

TEACHING ACTIVITES

Teaching assistant - Bionanotechnology (MS in 2016/2017 Biomedical Engineering) at Università Campus Bio-Medico di Roma", Italy.

2014/2016 Teaching assistant - Biomaterials (MS in Biomedical Engineering) at Università Campus Bio-Medico di Roma", Italy.

Prot. N.: 27/2016 and 328/2015

2013/2014 Teaching assistant – Principles of Tissue Engineering,

(MS in Biomedical Engineering) at Università Campus Bio-Medico di Roma", Italy.

Prot. N.: 214/2014

2010/2013 Teaching assistant – <u>Biomaterials</u> (MS in Biomedical Engineering) and <u>Biochemistry</u> (BS in Nutrition Science) at Università Campus Bio-Medico di Roma, Italy.

Prot. N.: 206/2013; 199/2012; 681/2011

COORDINATION OR PARTICIPATION IN NATIONAL/INTERNATIONAL RESEARCH GROUPS

03/2020-PRESENT

Coordinator of research activities regarding the use of induced pluripotent stem cells (IPSc) in the context of the "Technopole for precision medicine" project (TecnoMed Puglia - Puglia Region DGR n.2117 of 21/11/2018) at CNR-NANOTEC

03/2020-PRESENT

Participation in project activities related to the use of ratiometric optical biosensors in combination with induced pluripotent stem cells (IPSc) for the spatial and temporal sensing of pH and O2 within the research project ERC-2017- Starting Grant "Sensing cell-cell interaction heterogeneity in 3D tumor towards precision medicine INTERCELLMED "(No. 759959, 01/02 / 2018-31 / 01/2023, CUP: B81I17000170006) and the My First AIRC Grant (MFAG) research project" Nanopatterned metastatic melanoma for quantifying metabolic changes in mediated drug resistance "(No. 22902, 02/01 / 2020-01 / 01/2025, CUP: B54I19006180005), at CNR-NANOTEC.

03/2020-PRESENT

Coordinator of the activities concerning the generation of neuromuscular junction models from pluripotent stem cells within the project "Precision medicine for amyOtrophic LAteRal sclerosIS" (POLARIS), inserted within the "Technopole for precision medicine" (TecnoMed Puglia - Regione Puglia DGR n.2117 of 11/21/2018), at CNR-NANOTEC.

03/2020-PRESENT

Coordinator of the activities concerning the generation of in vitro models of liver and intestine for the project "GUt and LIVER iPSC-derived in vitro models (GULLIVER)" carried out in collaboration with CNR-NANOTEC within the "Technopole for precision medicine" (TecnoMed Puglia - Puglia Region DGR n.2117 of 11/21/2018) at CNR-NANOTEC.

02/2018-01/2020

Member of the research group in the project "Unveiling the molecular determinants of aging to design new therapeutics" (project n. CZ.02.1.01 / 0.0 / 0.0 / 15_003 / 0000492) coordinated by Dr. Giancarlo Forte, at ICRC- FNUSA (CZ).

03/2012-08/2015

Coordinator of Research Units within the FIRB 2010 project "Bioartificial materials and biomimetic scaffolds for a stem cells-based therapy for myocardial regeneration" (project budget: € 1,062,000; financed amount: € 835,620). Project coordinated by Prof. Valeria Chiono.

SUPERVISION OF GRADUATE STUDENTS

2017/2018 Role: Co-supervisor

Degree: BS in Biomedical Engineering, Università

Campus Bio-Medico di Roma, Italy

Title: Patterned substrates to control cell alignment

2016/2017 Role: Co-supervisor

Degree: BS in Biomedical Engineering, Università

Campus Bio-Medico di Roma, Italy

Title: Tumor-on-a-chip: microfluidic platform to

study the tumor/immune interface

2011/2012 Role: Co-supervisor

Degree: MS in Biomedical Engineering, Università

Campus Bio-Medico di Roma, Italy

Title: ECM-based hydrogels for the regeneration of

cartilage

2010/2011 Role: Co-supervisor

Degree: BS in Biomedical Engineering, Università

Campus Bio-Medico di Roma, Italy

Title: Chitosan-based scaffolds for tissue engineering

CAREER BREAKS

01-11-2013/02-04-2014 Maternity leave for 5 months 26-10-2016/28-03-2017 Maternity leave for 5 months

TECHNICAL SKILLS

My expertise includes:

- solid background in cellular and molecular biology, and biochemistry (gene expression analysis using qPCR and protein expression using ELISA, Western blotting; plasmid purification, cell transformation, cell transfection and cell infection with viral particles);
- Independent design, development and prosecution of in vitro cell-based assays;

- Wide experience in stem/progenitor, human IPS cell culture and differentiation (cardiac differentiation, motoneuronal differentiation and skeletal muscle differentiation), enrichment, and functional assays;
- advanced culture systems- microfluidics and 3D cultures;
- experience in drug delivery system and in evaluating tissue-engineered constructs, with particular focus on cell phenotype, morphology, and cell-scaffold interactions;
- hands-on experience in biological microscopy (epifluorescence, confocal, biological TEM);
- participate in the effective mentoring, supervision, and professional development of junior laboratory staff;
- experience in laboratory equipment management;
- experience in project financial management;
- communication and partnership with other groups within and outside own area (i.e. engineers, chemists and medical doctors)

PUBLICATIONS

Author-level metrics (Scopus: 23390662600):

• *h*-index : 21

• total citations: 1456

- 1. *A primer to Traction Force Microscopy.* Zancla A*, **Mozetic P***, Orsini M, Forte G, Rainer A. Accepted Journal of Biological Chemistry
 - * Equal contribution
- 2. *Neurovascular signals in Amyotrophic Lateral Sclerosis*. Sorrentino S, Polini A, Arima V, Romano A, Quattrini A, Gigli G, Mozetic P, Moroni L. Current Opinion in Biotechnology ISSN: 0958-1669.

IF (2021): 9.740

Quartiles: Q1; Subject Area: Biotechnology, Biomedical Engineering, Bioengineering.

3. Nano-encapsulation of hydroxytyrosol into formulated nanogels improves therapeutic effects against hepatic steatosis: an in vitro study. Mauri E, Gori M, Giannitelli SM, Zancla A, Mozetic P, Abbruzzese F, Merendino N, Gigli G, Rossi F, Trombetta M, Rainer A. Materials Science and Engineering C, 2021, 124, 112080. Doi: 10.1016/j.msec.2021.112080

IF (2021): 7.328

Quartiles: Q1; Subject Area: Materials Science and engineering

Author Contribution: Performed the experiments; Analyzed the data; Wrote the paper

4. YAP-TEAD1 control of cytoskeleton dynamics and intracellular tension guides human pluripotent stem cell mesoderm specification. Pagliari S, Vinarsky V, Martino F, Perestrelo AR, De La Cruz JO, Caluori G, Vrbsky J, Mozetic P, Pompeiano A, Zancla A, Ranjanu SG, Skladal P, Kytyr D, zdrahal Z, Grassi G, Sampaolesi M, Rainer A, Forte G. Cell Death and Differentiation, 2021, 28(4), 1193-1207. Doi: 10.1038/s41418-020-00643-5

IF (2021): 15.828

Quartiles: Q1; Biochemistry, Cell Biology and Molecular Biology

Author Contribution: Performed the experiments; Analyzed the data; Wrote the paper

- 5. Direct-Write Deposition of Thermogels. Giannitelli SM, Chiono V, Mozetic P*. Methods in Molecular Biology (2021) 2147; 137-142. doi: 10.1007/978-1-0716-0611-7_11 *corresponding author
- Graphene-laden hydrogels: A strategy for thermally triggered drug delivery. Mauri E, Salvati A, Cataldo A, Mozetic P, Basoli F, Abbruzzese F, Trombetta M, Bellucci S, Rainer A. Materials Science and Engineering C, 2021, 118, 111353. Doi: 10.1016/j.msec.2020.111353

IF (2021): 7.328

Quartiles: Q1; Subject Area: Materials Science and engineering

Author Contribution: Performed the experiments; Analyzed the data; Wrote the paper

7. Quercetin and hydroxytyrosol as modulators of hepatic steatosis: a NAFLD-on-a-chip study. Gori M, Giannitelli SM, Zancla A, **Mozetic P**, Trombetta M, Merendino N, Rainer A. Biotechnology and Bioengineering, 2021, 118(1), pp. 142–152. Doi: 10.1002/bit.27557

IF (2021): 4.530

Quartiles: Q1; Subject Area: Biochemistry, Genetics and Molecular Biology, Biotechnology; Bioengineering, Applied Microbiology and Biotechnology.

Author Contribution: Performed the experiments; Analyzed the data; Wrote the paper

8. Biofabrication of Hepatic Constructs by 3D Bioprinting of a Cell-Laden Thermogel: An Effective Tool to Assess Drug-Induced Hepatotoxic Response. Gori M, Giannitelli SM, Torre M, Mozetic P, Abbruzzese F, Trombetta M, Traversa E, Moroni L, Rainer A. Advanced Healthcare Materials, 2020, 9(21), 2001163. Doi: 10.1002/adhm.202001163 IF (2021): 9.933

Quartiles: Q1; Subject Area: Pharmaceutical Science, Biomaterials and Biomedical Engineering.

Author Contribution: Performed the experiments; Analyzed the data; Wrote the paper

9. Ester coupling of ibuprofen in hydrogel matrix: a facile one-step strategy for controlled anti-inflammatory drug release. Mauri E, Rossetti A, **Mozetic P**, Schiavon C, Sacchetti A, Rainer A, Rossi F. Eur J Pharm Biopharm (2020) 146; 143-149. doi: 10.1016/j.ejpb.2019.11.002

IF (2021): 5.571

Quartiles: Q1; Subject Area: Biochemistry, Genetics and MOlecular Biology, Biotechnology; Medicine; Pharmacology, Toxicology and Pharmaceutics.

Author Contribution: Performed the experiments; Analyzed the data; Wrote the paper.

10. Seriate cytology vs molecular analysis of peritoneal washing to improve gastric cancer cells detection. Taffon C, Giovannoni I, **Mozetic P**, Capolupo GT, La Vaccara V, Cinque C, Caricato C, Rainer A, Zelano G, Crescenzi A. Diagn Cytopathol. (2019) 47(7); 670-674. doi: 10.1002/dc.24165.

IF (2021): 1.582

Quartiles: Q3; Subject Area: Histology, Medicine, Pathology and Forensic Medicine Author Contribution: Planned and performed molecular analysis

11. Biomechanical characterization at the cell scale: present and prospects. Basoli F, Giannitelli SM, Gori M, **Mozetic P**, Bonfanti A, Trombetta M, Rainer A. Front Physiol. (2018) Nov 15;9:1449. doi: 10.3389/fphys.2018.01449

IF (2021): 4.566

Quartiles: Q1; Subject Area: Biochemistry, Genetics and Molecular Biology, Physiology Author contribution: Wrote the review.

12. Surface functionalization of polyurethane scaffolds mimicking the myocardial microenvironment to support cardiac primitive cells. Boffitto M*, Di Meglio F*, Mozetic P*, Giannitelli SM, Carmagnola I, Castaldo C, Nurzynska D, Sacco AM, Miraglia R, Montagnani S, Vitale N, Brancaccio M, Tarone G, Basoli F, Rainer A, Trombetta M, Ciardelli G, Chiono V. PlosOne (2018) 6;13(7):e0199896. doi: 10.1371/journal.pone.0199896

* Equal contribution

IF (2021): 3.240

Quartiles: Q1; Subject Area: Biochemistry, Genetics and Molecular Biology.

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper.

13. Endocannabinoid system in systemic lupus erythematosus: evidence for a deranged 2-arachidonoylglycerol metabolism. Navarini L, Bisogno T, **Mozetic P**, Piscitelli F, Margiotta DPE, Basta F, Afeltra A, Maccarone M. Int J Biochem Cell Biol. (2018) 12:99:161-168.

doi: 10.1016/j.biocel.2018.04.010

IF (2021): 5.085

Quartiles: Q1/Q2; Subject Area: Biochemistry (Q1) and Cell Biology (Q2)

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper.

14. Electric field assisted microfluidic synthesis of tailorable porous microbeads as injectable cell carriers for tissue engineering applications. Costantini M, Guzowski J, Żuk PJ, **Mozetic P**, De Panfilis S, Jaroszewicz J, Pierron M, Trombetta M, Dentini M, Święszkowski W, Rainer A, Garstecki P, Barbetta A. Advanced Functional Materials (2018), 28; 20. doi: 10.1002/adfm.201800874

IF (2021): 18.808

Quartiles: Q1; Subject Area: Biomaterials (Q1), Nanoscience and Nanotechnology (Q1) Author contribution: Conceived and designed the biological experiments; Performed biological experiments; Analyzed the data; Wrote the paper.

15. *Hyaluronan: an overview*. Abbruzzese F, Basoli F, Costantini M, Giannitelli SM, Gori M, **Mozetic P**, Rainer A, Trombetta M. J Biol Regul Homeost Agents. (2017); 31 (4 Suppl 2): 9-22

IF (2021): 1.397

Quartiles: Q3/Q4; Subject Area: Cancer Research, Endocrinology, Immunology,

Oncology, Physiology.

Author contribution: Wrote the paper.

16. Engineering muscle cell alignment through 3D bioprinting. **Mozetic P***, Giannitelli SM*, Gori M, Trombetta M, Rainer A. J Biomed Mater Res A. (2017) Sep; 105(9): 2582-2588. doi: 10.1002/jbm.a.36117

*Equal contribution

IF (2021): 4.396

Quartiles: Q1/Q2; Subject Area: Biomaterials (Q2), Biomedical Engineering (Q2), Ceramics and Composites (Q1), Metals and Alloys (Q1)

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper.

17. Classification of human M1/M2 macrophage polarization by label-free hyperspectral reflectance confocal microscopy and multivariate analysis. Bertani FR, Mozetic P, Fioramonti M, Iuliani M, Ribelli G, Pantano F, Santini D, Trombetta M, Businaro L, Selci S, Rainer A. Scientific Reports (2017) 21; 7(1): 8965. doi: 10.1038/s41598-017-08121-8.

IF (2021): 4.379

Quartiles: Q1: Multidisciplinary

Author contribution: Conceived and designed the experiments; Performed the experiments (gene expression analysis and cytofluorimetric characterization); Analyzed the data; Wrote the paper.

18. Microfluidic-enhanced 3D bioprinting of aligned myoblast-laden hydrogels leads to functionally organized myofibers in vitro and in vivo. Costantini M, Testa S, **Mozetic P**, Barbetta A, Fuoco C, Fornetti E, Tamiro F, Bernardini S, Jaroszewicz J, Swieszkowski W, Trombetta M, Castagnoli L, Seliktar D, Garstecki P, Cesareni G, Cannata S, Rainer A, Gargioli C. Biomaterials (2017); 131: 98-110. doi: 10.1016/j.biomaterials.2017.03.026 IF (2021): 12.479

Quartiles: Q1; Subject Area: Biochemistry, Genetics and Molecular Biology, Chemical Engineering, Engineering, Materials Science

Author contribution: Conceived and designed the experiments; Performed the molecular biology and immunofluorescence experiments; Analyzed the data; Wrote the paper.

19. Combining Type I Interferons and 5-aza-2'-Deoxycitidine to improve anti-tumor responce against melanoma. Lucarini V, Buccione C, Ziccheddu G, Peschiaroli F, Sestili P, Puglisi R, Mattia G, Zanetti C, Parolini I, D'Urso MT, Macchia D, Spada M, De Ninno A, Gerardino A, Mozetic P, Trombetta M, Rainer A, Businaro L, Schiavoni G, Matteri F. J Invest Dermatol (2017); 137(1): 159-169. doi: 10.1016/j.jid.2016.08.024. IF (2021): 8.551

Quartiles: Q1 Subject Area: Biochemistry, Genetics and Molecular Biology

Author contribution: Performed the live cell imaging experiments; Analyzed the data; Wrote the paper.

20. Functionalization of poly(ε-caprolactone) surface with lactose-modified chitosan via alkaline hydrolysis: ToF-SIMS characterization. Tortora L*, Concolato S, Urbini M, Giannitelli SM, Basoli F, Rainer A, Trombetta M, Orsini M, **Mozetic P***. Biointerphases (2016); 11(2): 02A323. doi: 10.1116/1.4942498

*corresponding authors

IF (2021): 2.456

Quartiles: Q2/Q3; Subject Area: Biochemistry, Genetics and Molecular Biology, Biomaterials, Chemistry, Materials Science, Physics and Astronomy

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper.

21. Correlation between porous texture and cell seeding efficiency of gas foaming and microfluidic foaming scaffolds. Costantini M, Colosi C, **Mozetic P**, Jaroszewicz J, Tosato A, Rainer A, Trombetta M, Swieszkowski W, Dentini M, Barbetta A. Mater Sci Eng C (2016); 62: 668-677. doi: 10.1016/j.msec.2016.02.010

IF (2021): 7.328

Quartiles: Q1; Subject Area: Engineering, Materials Science, Physics and Astronomy Author contribution: Performed the cell biology experiments; Analyzed the data; Wrote the paper.

22. Pluronic F127 hydrogel characterization and biofabrication in cellularized constructs for tissue engineering applications. Gioffredi E, Boffito M, Calzone S, Giannitelli SM, Rainer A, Trombetta M, **Mozetic P**, Chiono V. (2016) Procedia CIRP Volume 49: 125-132 doi: 10.1016/j.procir.2015.11.001

Subject Area: Engineering

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Contribute reagents/materials/analysis tools; Wrote the paper.

23. Cells and extracellular matrix interplay in cardiac valve disease: because age matters. Spadaccio C, **Mozetic P**, Nappi F, Nenna A, Sutherland F, Trombetta M, Chello M, Rainer A. Basic Res Cardiol (2016); 111(2): 16. doi: 10.1007/s00395-016-0534-9 IF (2021): 17.165

Quartiles: Q1; Subject Area: Biochemistry, Genetics and Molecular Biology, Medicine Author contribution: Wrote the paper.

24. Combined additive manufacturing approaches in tissue engineering. Giannitelli SM, **Mozetic P**, Trombetta M and Rainer A. Acta Biomater. (2015); 24: 1-11. doi: 10.1016/j.actbio.2015.06.032

IF (2021): 8.947

Quartiles: Q1/Q2; Subject Area: Biochemistry (Q1), Biomaterials (Q1), Biomedical Engineering (Q1), Biotechnology (Q1), Molecular Biology (Q2) Author contribution: Wrote the paper.

25. The effect of Post Mastectomy Radiation Therapy on breast implants: evaluation of biomaterial alterations with implications on capsular contracture. Ribuffo D, Lo Torto F, Giannitelli SM, Urbini M, Tortora L, **Mozetic P**, Trombetta M, Basoli F, Licoccia S, Tombolini V, Cassese R, Scuderi N, Rainer A. Mater Sci Eng C Mater Biol Appl. (2015); 57: 338-343. doi: 10.1016/j.msec.2015.07.015 IF (2021): 7.328

Quartiles: Q1; Subject Area: Engineering, Materials Science, Physics and Astronomy Author contribution: Performed the experiments; Analyzed the data; Wrote the paper.

26. Graded porous polyurethane foams as possible scaffolds for oro maxillary bone regeneration. Giannitelli SM, Basoli F, **Mozetic P**, Piva P, Bartuli FN, Luciani F, Arcuri C, Trombetta M, Rainer A, Licoccia S. Mater Sci Eng C Mater Biol Appl. (2015); 51: 329-335. doi: 10.1016/j.msec.2015.03.002

IF (2021): 7.328

Quartiles: Q1; Subject Area: Engineering, Materials Science, Physics and Astronomy Author contribution: Performed the experiments; Analyzed the data; Wrote the paper.

27. The role of extracellular matrix in age-related conduction disorders: a forgotten player? Spadaccio C, Rainer A, **Mozetic P**, Trombetta M, Dion RA, Barbato R, Nappi F, Chello M. J Geriatr Cardiol. (2015); 12(1): 76-82. doi: 10.11909/j.issn. 1671-5411.2015.01.009 Review

IF (2021): 3.327

Quartiles: Q2/Q3; Subject Area: Cardiology and Cardiovascular Medicine (Q3),

Geriatrics and Gerontology (Q2)

Author contribution: Wrote the paper.

28. A primer of statistical methods for correlating parameters and properties of electrospun poly-L-lactide scaffolds for tissue engineering-PART 2: Regression. Seyedmahmoud R*, **Mozetic P***, Rainer A*, Giannitelli SM, Basoli F, Trombetta M, Traversa E, Licoccia S, Rinaldi A. J Biomed Mater Res A. (2015); 103: 103-114. doi: 10.1002/jbm.a.35183.

*Equal contribution

IF (2021): 4.396

Quartiles: Q1/Q2; Subject Area: Biomaterials, Biomedical Engineering, Ceramics and Composites, Metals and Alloys.

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper.

29. *A primer of statistical methods for correlating parameters and properties of electrospun poly(L-lactide) scaffolds for tissue engineering. I. Design of experiments.* Seyedmahmoud R*, Rainer A*, **Mozetic P**, Giannitelli SM, Trombetta M, Traversa E, Licoccia S, Rinaldi A. J Biomed Mater Res A. (2015); 103: 91-102. doi: 10.1002/jbm.a.35153.

*Equal contribution

IF (2021): 4.396

Quartiles: Q1/Q2; Subject Area: Biomaterials, Biomedical Engineering, Ceramics and Composites, Metals and Alloys.

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper.

30. Biological response of human mesenchymal stromal cells to Titanium grade 4 implants coated with PCL/ZrO2 hybrid materials synthesized by sol-gel route: in vitro evaluation. Catauro M, Bollino F, Papale F, **Mozetic P**, Rainer A, Trombetta M. Mater Sci Eng C Mater Biol Appl. (2014); 45: 395-401. doi: 10.1016/j.msec.2014.09.007. IF (2021): 7.328

Quartiles: Q1; Subject Area: Engineering, Materials Science, Physics and Astronomy Author contribution: Conceived and designed the experiments; Performed cell and molecular biology experiments; Analyzed the data; Wrote the paper.

31. Surface decoration of electrospun scaffolds by microcontact printing. Giannitelli SM, Abbruzzese F, **Mozetic P**, De Ninno A, Businaro L, Gerardino A, Rainer A. Asia-Pac. J. Chem. Eng. (2014); 9: 401-406. doi:10.1002/apj.1809

IF(2021): 1.447

Quartiles: Q2/Q3; Subject Area: Chemical Engineering, Energy.

Author contribution: Performed the experiments; Analyzed the data; Wrote the paper.

32. Electrospinning of hydroxyapatite-chitosan nanofibers for tissue engineering applications. Liverani L, Abbruzzese F, **Mozetic P**, Basoli F, Rainer A, Trombetta M. Asia-Pac. J. Chem. Eng. (2014); 9: 407-414. doi: 10.1002/apj.1810

IF (2021): 1.447

Quartiles: Q2/Q3; Subject Area: Chemical Engineering, Energy.

Author contribution: Performed the experiments; Analyzed the data; Wrote the paper.

33. Polyurethane-based scaffolds for myocardial tissue engineering. Chiono V, Mozetic P, Boffito M, Sartori S, Gioffredi E, Silvestri A, Rainer A, Giannitelli SM, Trombetta M, Nurzynska D, Di Meglio F, Castaldo C, Miraglia R, Montagnani S, Ciardelli G. Interface Focus. (2014) Feb 6;4(1):20130045. doi: 10.1098/rsfs.2013.0045 IF (2021): 3.906

Quartiles: Q1/Q2; Subject Area: Biochemistry, Bioengineering, Biomaterials, Biomedical Engineering, Biophysics, Biotechnology.

Author contribution: Conceived and designed the experiments; Performed the experiments; Analyzed the data; Wrote the paper; Contribute reagents/materials/analysis tools.

34. Bioactive electrospun scaffold for annulus fibrosus repair and regeneration. Vadalà G, **Mozetic P**, Rainer A, Centola M, Loppini M, Trombetta M, Denaro V. Eur Spine J. (2012) May;21 Suppl 1:S20-6. doi: 10.1007/s00586-012-2235-x.

IF (2021): 3.134

Quartiles: Q1; Subject Area: Orthopedics and Sports Medicine, Surgery

Author contribution: Conceived and designed the experiments; Performed cell and molecular biology experiments; Analyzed the data; Wrote the paper.

35. The endocannabinoid system in gp120-mediated insults and HIV-associated dementia. Bari M, Rapino C, **Mozetic P**, Maccarrone M. Exp Neurol. (2010) Jul;224(1):74-84. doi: 10.1016/j.expneurol.2010.03.025. Review.

IF (2021): 5.330

Quartiles: Q1; Subject Area: Developmental Neuroscience, Neurology

Author contribution: Wrote the paper.

36. Temperature-sensitive poly(vinyl alcohol)/poly(methacrylate-co-N-isopropyl acrylamide) microgels for doxorubicin delivery. Ghugare SV, **Mozetic P**, Paradossi G. Biomacromolecules. (2009) Jun 8;10(6):1589- 96. doi: 10.1021/bm900185u.

IF (2021): 6.988

Quartiles: Q1; Subject Area: Bioengineering, Biomaterials, Materials Chemistry, Polymers and Plastics

Author contribution: Conceived and designed experiments; Performed experiments; Analyzed the data; Wrote the paper.

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Author contribution: Conceived and designed the experiments; Performed experiments; Analyzed the data; Wrote the paper.

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Author contribution: Conceived and designed the experiments; Performed experiments; Analyzed the data; Wrote the paper.

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Quartiles: Q1; Subject Area: Biochemistry, Genetics and Molecular Biology, Chemical Engineering, Engineering, Materials Science

Author contribution: Conceived and designed the experiments; Performed experiments; Analyzed the data.

PATENT

a) Porous material for the inclusion of cytologic specimens, process for the obtaining and their use (Materiale poroso per l'inclusione di preparati citologici, procedimento per l'ottenimento dello stesso e suo uso) Italian Patent Application nr. 102016000111352 11/4/2016: A. Crescenzi, M. Trombetta, C. Taffon, A. Rainer, P. Mozetic, M. Costantini, A. Santoro.

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i. Additive manufacturing of Pluronic/Alginate composite thermogels for drug and cell delivery. Giannitelli SM, Mozetic P, Trombetta M and Rainer A. Additive Manufacturing. Innovative, advances and applications. Taylor and Francis (2016) ISBN: 978-1-4987-1477-8; doi: 10.1201/b19360-17.

ii. Polymer based biointerface: a case study on device for theranostics and tissue engineering. **Mozetic P**, Tortora M, Cerroni B, Paradossi G. VI capitol del libro: Ultrasound Contrast agents, Targeting and processing methods for theranostics. Eds, Springer-Verlag, Italia, Milan, 67-77 (2010) ISBN 978-88-470-1493-0

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- 1. Microfluidic Foaming as an Effective Tool to Augment the Control over Scaffold Microarchitecture. Costantini M., Colosi C., Mozetic P., Tosato A., Rainer A., Trombetta M., Jaroszewicz J., Swieszkowski W., Dentini M. Barbetta A. AICIng 2015. ISBN 9788879598774
- 2. Functionalization of Polycaprolactone Surfaces with Lactose-Modified Chitosan: a Secondary Ion Mass Spectrometry Study. Concolato S., Mozetic P., Giannitelli SM., Rainer A., Trombetta M., Orsini M., Tortora L. AICIng 2015. ISBN 9788879598774
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- 6. Biofunctionalization of additively manufactured PCL scaffolds for bone tissue engineering. **Mozetic P**, Giannitelli SM, Rainer A, Trombetta M. AICIng 2012, 155-156 ISBN 978-88-7051-226-7
- 7. Computer-Aided Tissue engineering for bone regeneration. Rainer A, Mozetic P, Giannitelli SM, Accoto D, De Porcellinis S, Guglielmelli E, Trombetta M. Biomedical Robotics and Biomechatronics (BioRob), (2012) 473-476 doi:10.1109/BioRob.2012.6290894

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CONFERENCE ATTENDANCE

• **P. Mozetic**, A. Zancla, M. Orsini, M. Trombetta, G. Forte, A. Rainer. "In vitro platforms for mechanobiological studies". <u>Oral Presentation</u>. Nanoscience & Nanotechnology 2019 INFN-LNF. Frascati (RM), 15-17 October 2019

- **P. Mozetic**, A. Zancla, M. Orsini, M. Trombetta, G. Forte, A. Rainer. "Evaluation of cardiac fibroblast activation via Traction Force Microscopy". Oral Presentation. VIII Workshop Nazionale AICIng. Lipari, 27-29 June 2019
- **P. Mozetic**, A. R. Perestrelo, J. Oliver-De La Cruz, G. Forte. "*In vitro model of cardiac fibrotic process to unveil the mechanisms of cardiac cells crosstalk*". <u>Poster presentation</u>. First multidisciplinar conference of the italian researchers in Czech Republic. Praha, 18-20 June 2019
- T. Bisogno, A. Rainer, **P. Mozetic**, V. Di Marzo, M. Trombetta, M. Maccarrone. "Release of N-Acylethanolamines by biomaterials of clinical relevance". <u>Poster presentation</u>. 24th annual symposium of the International Cannabinoid research Society. Baveno, June 28-July 3, 2014. ISBN: 978-0-9892885-1-4
- P. Sirianni, A.M. Di Rienzo, M. Boffito, V. Chiono, S. Sartori, S. M. Giannitelli, P. Mozetic, A. Rainer, G. Ciardelli. "Preparation and characterization of sol-gel systems for myocardial regeneration". Poster presentation. SIB Congress, Baveno (VB), 3-5 June 2013.
- V. Chiono, A. Silvestri, M. Boffito, E. Gioffredi, A. M. Di Rienzo, S. Sartori, S. Giannitelli, P. Mozetic, A. Rainer, D. A. Nurzynska, C. Castaldo, F. Di Meglio, G. Ciardelli. "Biomimetic Polyurethane Scaffolds for Myocardial Tissue Engineering". Poster presentation. SIB Congress, Baveno (VB), 3-5 June 2013.
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- P. Mozetic, M. Tortora and G. Paradossi. "Viability and cytotoxicity of poly(vinyl alcohol) based microparticles for potential use in diagnostics and drug delivery".
 <u>Poster Presentation</u>. ESF Research Conference "Probing interaction between Nanoparticles/Biomaterials and Biological Systems: alternative approaches to Bio-and Nano-toxicity", Sant Feliu de Guixols, Spain 3-8 November 2007
- M. Tortora, **P. Mozetic**, G. Paradossi. "Functionalization of poly(vinylalcohol) based hydrogels for cells adhesion", <u>Poster Presentation</u>. ESF Research Conference "Probing interaction between Nanoparticles/Biomaterials and Biological Systems: alternative approaches to Bio-and Nano-toxicity", Sant Feliu de Guixols, Spain 3-8 November 2007
- Conference attendance to: 2° Seminario Nazionale "Il Ciclo Cellulare- The Cell Cycle";
 Rome 8-10 June 2006 organized by Società Italiana di Biofisica e Biologia Molecolare
- Conference attendance to: 11° Corso Scuola Biomateriali: Superfici ed Interfacce: modifiche, caratterizzazione e risposta biologica. Ischia Porto (Na), 5-9 July 2004 organized by CIRMIB
- Conference attendance to: Seminario di Genomica e Proteomica. Trieste 12 February 2004 organized by University of Trieste and Centro di Eccellenza in Biocristallografia
- Conference attendance to: 10° Corso Scuola Biomateriali: Ingegneria dei tessuti, cellule staminali e terapia genica. Ischia Porto (Na), 7-11 July 2003 organized by CIRMIB

AWARDS

• FRONTISPIECE: Energy Harvesting: Electric Field Assisted Microfluidic Platform for Generation of Tailorable Porous Microbeads as Cell Carriers for Tissue Engineering (Adv. Funct. Mater. 20/2018). Costantini M, Guzowski J, Żuk PJ, Mozetic P, De Panfilis S, Jaroszewicz J, Pierron M, Trombetta M, Dentini M, Święszkowski W, Rainer A, Garstecki P, Barbetta A.

• BEST POSTER AWARD: F. Abbruzzese, M. Gori, S.M. Giannitelli, M. Torre, P. Mozetic, M. Trombetta, A. Rainer. Bioprinting di costrutti epatici come piattaforma per test tossicologici in vitro (Bioprinting of hepatic constructs as an in vitro toxicology platform). VIII AICIng Conference, Bologna, Italy, September 9-12, 2018.

Coucle Juzetic

Lecce, 15th February 2022

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