

Laura Pastorino

Curriculum vitae et studiorum

Present Position:

Assistant Professor of Bioengineering at the Department of Informatics, Bioengineering, Robotics and Systems Engineering, University of Genoa, Italy.

Education:

2000 – 2003: Ph.D. course in Biophysics at the Department of Biophysical, M&O Science and Technologies, University of Genoa, Italian National Research Council, ISMAC, Genoa (Prof. Gianna Costa), Louisiana Tech University (Prof. Yuri Lvov); Thesis title: "Nanobiocatalytic processes and their environmental applications" (advisor: Prof. Claudio Nicolini; financial support from ABB Italia).

1999: M.D. in Chemical Engineering (mark: 110/110) at the University of Genoa, by defending the experimental thesis "Development of immobilization techniques of Penicillin G Acylase for the production of antibiotics by biotechnology" (advisors: Prof. Vincenzo Tagliasco, Prof. Claudio Nicolini).

Work experience:

April 2009-present: *User* at the European Synchrotron Radiation Facility (ESFR, Grenoble, France) on the characterization of multilayered nanostructures and their interaction with biomolecules.

2004 – 2006: *Researcher* at the Fondazione EL.B.A. (Electronics Biotechnology Advanced) on the project "ORGANIC NANOTECHNOLOGIES AND NANOSCIENCES" FIRB 2001 and on the Research National Program "Biocatalysis" (BTA6 project).

2002: *Adjunct Research Faculty Member* at the Louisiana Tech University for nano-assembly and nano-particle research at the Institute for Micromanufacturing (Ruston, LA, USA).

2001: research member at the National Institute of Biostructures & Biosystems on the CNR5% project "NANOTECHNOLOGY".

Teaching experience:

- Academic course *2013/2014:* Professor for the course "Molecular, Cellular and Tissue Engineering".
- Academic course *2012/2013:* Professor for the course " Biomaterials and Molecular and Tissue Engineering".

- Academic course *2005/2006*: teaching assistant (Art. 33) for the course "Informatics" (Biotechnology degree).
- Academic course *2005/2006*: teaching assistant (Art. 33) for the course "Cell and Tissue Engineering" (Biomedical Engineering degree).
- Supervisor of several students for Laurea Thesis and Ph.D. students.

Career related activities:

- *Project evaluator* for stage 1 and stage 2 grant applications for the European Union 7th Framework, Theme: Nanosciences, Nanotechnologies, Materials and new Production Technologies.
- *Project evaluator* for single stage grant applications for the European Union 7th Framework, Theme: Food, Agriculture and Fisheries, and Biotechnology
- *Project evaluator* for the Czech Science Foundation (public funding agency in the Czech Republic).
- *Project evaluator* for the Polish-Norwegian Research Programme.
- *Reviewer* for:
 - IEEE Transactions on Nanobioscience
 - Biotechnology Progress (Wiley)
 - International Journal of Pharmaceutics (Elsevier)
 - Journal of Proteome Research (America Chemical Society)
 - Colloids and Surfaces A: Physicochemical and Engineering Aspects (Elsevier)
 - BioNanoScience (Springer)
 - Colloids and Surfaces B: Biointerfaces (Elsevier)
 - Current Organic Chemistry (Bentham)
 - Materials Science & Engineering C-Biomimetic and Supramolecular Systems (C) (Elsevier)
 - Biomedical Materials (IOPscience)
 - Dentistry (Omics Publishing Group)
 - RSC Advances
 - Recent Patents on Nanomedicine (Bentham)
- *Member of the local organizing committee* of IEEE NANO 2009, July 26-30 2009, Genoa, Italy.

Projects involvement:

- Involved in numerous National and International research projects, such as:
 - LANIR, "Real Time Label Free Nanoscopy Using Infra Red Absorption", granted by the *European Commission -VII Framework*, Activity area: Nanosciences, Nanotechnologies, Materials and new Production Technologies.
 - TASNANO, "Tools and Technologies for the Analysis and Synthesis of Nano Structures", granted by the *European Commission -VI Framework*, Activity area: Nanotechnologies and nano-sciences, knowledge-based multifunctional materials and new production processes and devices.
 - CARDIOWORKBENCH (coordinator's group), "Drug Design for Cardiovascular Diseases: Integration of In Silico and in Vitro", granted by the *European*

Commission-VI Framework, Activity area: Life sciences, genomics and biotechnology for health.

- DEVELOPMENT OF NEW TECHNOLOGIES FOR THE PRODUCTION OF BIOLOGICAL MOLECULES WITH ANTICANCER ACTION, granted by *Advanced Biotechnology Center, Genoa, Italy*.
- BIOREACTORS AND BIOSENSORS, granted by *Tattile S.r.l, Italy*.
- ORGANIC NANOTECHNOLOGIES AND NANOSCIENCES, FIRB project granted by the *Italian Ministry of University and Research*.
- Research National Program "BIOCATALYSIS", BTA6 project, granted by the *Italian Ministry of University and Research*.

Grants:

2013: Beam-time allocated (18 shifts) on the ID10B Troika II Beamline, at the European Synchrotron Radiation Facility (ESRF), Grenoble, France. Proposal: "Real time monitoring of structure variation of protein-containing layers and capsules", Proposer Dr. L. Pastorino, co-proposers Prof. V. Erokhin, Dr. S. Erokhina.

2011: Beam-time allocated (18 shifts) on the ID10B Troika II Beamline, at the European Synchrotron Radiation Facility (ESRF), Grenoble, France. Proposal: "Reflectivity and X-ray fluorescence study of collagen – collagenolytic enzymes matrix metalloproteinases in monolayers at the liquid-solid interface", Proposer Prof V. Erokhin, co-proposers Dr L. Pastorino, Dr. S. Erokhina.

Scientific Interests:

- Fabrication and characterization of protein thin films by using Langmuir-Blodgett and self-assembly techniques for biocatalytic and biomedical applications.
- Fabrication and characterization of nano-biosensors.
- Fabrication and characterization of stimuli responsive nanocapsules for drug delivery.
- Characterization of biomolecules interaction by synchrotron radiation.
- Development and optimization of biocatalytic processes for industrial applications.

Membership:

- Italian National Bioengineering group (GNB)
- National Institute of Biostructures & Biosystems (INBB)

Editorial activity:

- Associate Editor of *BioNanoScience* (Springer).
- Editorial Board Member of the *British Biotechnology Journal*.
- Academic Editor of *Journal of Advances in Biology & Biotechnology* (Science Domain).

Publications:**Book chapters**

1. L. Pastorino, S. Erokhina, "Nanobiocatalytic systems: thin films of enzymes" in "Biocatalysis Research Progress" (ISBN: 978-1-60456-619-2) edited by Nova Science Publishers Inc., Hauppauge (NY), USA.
2. L. Pastorino, S. Erokhina, "Protein thin films: sensing elements for sensors" in Nanosensors: Theory and Applications in Industry, Healthcare and Defense, edited by Taylor and Francis, USA.

Publications on international journals

3. L. Pastorino, E. Dellacasa, S. Scaglione, M. Giulianelli, F. Sbrana, M. Vassalli, C. Ruggiero (2014). Oriented collagen nanocoatings for tissue engineering. *Colloids and Surfaces B: Biointerfaces*, <http://dx.doi.org/10.1016/j.colsurfb.2013.10.026>.
4. N. Habibi, L. Pastorino, C. Ruggiero (2014). Functionalized biocompatible polyelectrolyte multilayers for drug delivery: In situ investigation of mechanical properties by dissipative quartz crystal microbalance. *Materials Science and Engineering: C*, Volume 35, pp. 15-20.
5. S. Erokhina, O. Konovalov, P. Bianchini, A. Diaspro, C. Ruggiero, V Erokhin, L. Pastorino (2013). Release kinetics of gold nanoparticles from collagen microcapsules by total reflection X-ray fluorescence. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 417, pp 83-88.
6. L. Pastorino, E. Erokhina, V. Erokhin (2013). Smart Nanoengineered Polymeric Capsules as Ideal Pharmaceutical Carriers, *Current Organic Chemistry*, 17, pp 58-64.
7. N. Habibi, L. Pastorino, O.H. Sandoval, C. Ruggiero (2013). Polyelectrolyte based molecular carriers: The role of self-assembled proteins in permeability properties. *Biomaterials Applications*
8. M. Salerno, F. Caneva Soumetz, L. Pastorino, N. Patra, A. Diaspro, C. Ruggiero (2013). Adhesion and Proliferation of Osteoblast-like Cells on Anodic Porous Alumina Substrates with Different Morphology, *IEEE Transactions on NanoBioscience*, 12, pp. 106-111.
9. L. Pastorino, S. Erokhina, P. Bianchini, O. Konovalov, A. Diaspro, C. Ruggiero (2011). Permeability variation study in collagen-based polymeric capsules, *BioNanoScience* 1, pp. 192–197.
10. N. Habibi, L. Pastorino, F. Caneva Soumetz, F. Sbrana, R. Raiteri and C. Ruggiero (2011) Nanoengineered Polymeric S-layers Based Capsules with Targeting Activity, *Colloids and Surfaces B: Biointerfaces*, *Colloids Surf B Biointerfaces* 88, pp.366-372.
11. L. Pastorino, S. Erokhina, F. Caneva Soumetz, P. Bianchini, O. Konovalov, A. Diaspro, C. Ruggiero, V. Erokhin (2011). Collagen containing microcapsules: Smart containers for disease controlled therapy, *Journal of Colloid and Interface Science* 357, pp. 56-62.
12. F. Caneva Soumetz, J. F. Saenz, L. Pastorino, C. Ruggiero, D. Nosi, and R. Raiteri (2010). Investigation of Integrin Expression on the Surface of Osteoblast-like Cells by Atomic Force Microscopy, *Ultramicroscopy*, vol 110, pp. 330-338, 2010.
13. F. Caneva Soumetz, L. Pastorino, R. Raiteri and C. Ruggiero. (2009) Functionalized AFM Probes for the Investigation of Integrin Distribution on the Surface of

- Osteosarcoma-derived Osteoblasts. *IEEE Review on Advances in Micro, Nano and Molecular Systems* (ISBN 1-4244-6295-6). Vol 6.
14. L. Pastorino, S. Erokhina, F. Caneva Soumetz, and C. Ruggiero (2009). Paclitaxel-containing nano-engineered polymeric capsules towards cancer therapy. *Journal of Nanoscience and Nanotechnology* vol. 9, pp. 6753-6759.
 15. M. Giacomini, L. Pastorino, F. Caneva Soumetz, J. Mielczarski, E. Mielczarski, Ivo Rangelow, Teodor Gotszalk, Nikos Glezos, Ejaz Huq, C. Ruggiero (2009). Data modeling for Tools and Technologies for the Analysis and Synthesis of NANOstructures (TASNANO) project. *Journal of Information Technology Research*, vol. 2 (3), pp. 49-79.
 16. V. Sivozhelezov, D. Bruzzese, L. Pastorino, E. Pechkova, C. Nicolini (2009). Increase of catalytic activity of lipase towards olive oil by Langmuir-film immobilization of lipase. *Enzyme and Microbial Technology*, vol. 44, pp. 72-76.
 17. S. Erokhina, L. Pastorino, F. Caneva Soumetz, and C. Ruggiero (2008). Nanoengineered polymeric capsules for cancer therapy. *IEEE Review on Advances in Micro, Nano and Molecular Systems* (ISBN 1-4244-6295-6). Vol 4.
 18. P. Arrigo, N. Maggi, M. Giacomini, M. Sturla, F. Caneva Soumetz, L. Pastorino, C. Ruggiero (2008). A genomic and proteomic based approach to pharmacotherapy for cardiovascular diseases. *IEEE Review on Advances in Micro, Nano and Molecular Systems* (ISBN 1-4244-6295-6) Vol 4.
 19. L. Pastorino, F. Caneva Soumetz, C. Ruggiero (2008). Fabrication and characterization of carbon nanotubes based coatings for the repair of cartilage tissue. *Tissue Engineering*, vol. 14 (5), pp. 852-853.
 20. F. Caneva Soumetz, L. Pastorino, R. Raiteri and C. Ruggiero (2008). Single Integrin Detection on the Surface of Osteosarcoma Derived Cells by means of Functionalized AFM probes. *Tissue Engineering, Part A* vol. 14(5), pp. 777.
 21. F. Caneva Soumetz, L. Pastorino, C. Ruggiero (2008). Human osteoblast-like cells response to nanofunctionalised surfaces for tissue engineering. *Journal of Biomedical Materials Research: Part B - Applied Biomaterials*, vol 84B, Issue 1, pp. 249-255.
 22. F. Caneva Soumetz, L. Pastorino, C. Ruggiero (2007). Osteoblast-like cell response to Layer by Layer self assembled biomimetic coatings. *IEEE Review on Advances in Micro, Nano and Molecular Systems* (ISBN 1-4244-6295-6). Vol 3.
 23. L. Pastorino, F. Caneva Soumetz, C. Ruggiero (2007). Layer by Layer self assembly of immunoglobulins for piezoelectric biosensors. *IEEE Review on Advances in Micro, Nano and Molecular Systems* (ISBN 1-4244-6295-6). Vol 2.
 24. F. Caneva Soumetz, L. Pastorino, C. Ruggiero (2007). Osteoblast-like cells response to nanostructured biomimetic coatings. *Tissue Engineering*, 13, p. 1740.
 25. S. Erokhina, L. Pastorino, F. Caneva Soumetz and C. Ruggiero (2007). Nanoengineered Polymeric Capsules for Cancer Therapy. *Tissue Engineering*, 13, pp. 1733-1734.
 26. L. Pastorino, F. Caneva Soumetz, M. Giacomini, C. Ruggiero (2006). Development of a piezoelectric immunosensor for Paclitaxel measurement. *Journal of Immunological Methods*, 313, pp. 119-198.
 27. L. Pastorino, F. Caneva Soumetz, C. Ruggiero (2006). Nanofunctionalisation for the treatment of peripheral nervous system injuries. *IEE Proceedings Nanobiotechnology*, 153/2, pp. 16-20.

28. L. Pastorino, F. Pioli, M. Zilli, A. Converti, C. Nicolini (2004). Lipase-Catalyzed Degradation of Polycaprolactone. *Enzyme and Microbial Technology*, 35/4, p. 321-326.
29. V. T. Troitsky, T. S. Berzina, L. Pastorino, E. Bernasconi, C. Nicolini (2003). A new approach to the deposition of nanostructured biocatalytic films. *Nanotechnology*, 14, p. 597-602.
30. M. Antonini, P. Ghisellini, L. Pastorino, C. Nicolini, C. Paternolli (2003). Preliminary electrochemical characterization of cytochrome P4501A2 – clozapine interaction. *IEE Proceedings – Nanobiotechnology*, 150, p. 31-34.
31. L. Pastorino, S. Disawal, C. Nicolini, Y. M. Lvov, V. V. Erokhin (2003). Complex catalytic colloids on the basis of firefly luciferase as optical nanosensor platform, *Biotechnology and Bioengineering* 84, p. 286-291.
32. L. Pastorino, C. Nicolini (2002). Langmuir-Blodgett films of Lipase for biocatalysis. *Materials Science & Engineering C-Biomimetic and Supramolecular Systems (C)*, 907, p. 419-422.
33. L. Pastorino, T. S. Berzina, V. I. Troitsky, M. P. Fontana, E. Bernasconi, C. Nicolini (2002). Biocatalytic LB assemblies based on Penicillin G Acylase. *Colloids and Surfaces B: Biointerfaces*, Vol. 23, p. 357-363.
34. L. Pastorino, T. S. Berzina, V. I. Troitsky, E. Bernasconi, C. Nicolini (2002). Application of monolayer engineering for immobilization of Penicillin G Acylase, *Colloids and Surfaces B: Biointerfaces*, 23, p. 289-293.

Invited presentations

35. L. Pastorino, "Nanostructured biocatalytic films", Proteomics and Synchrotron Radiation/Organic Electronics, December 6-8 2001, Moscow, Russia.
36. L. Pastorino, "Ultrathin films of biomolecules in healthcare", within the tutorial "Nanobiotechnology for healthcare: techniques and applications", IEEE NANO 2009, July 26-30 2009, Genoa, Italy.
37. L. Pastorino, "Langmuir-Blodgett technology and functional enzymes", within the INTERNATIONAL XXII EL.B.A. NANOFORUM on "Nanotechnology and protein microarrays: label free functional proteomics", October 5 2009, Genoa, Italy.
38. L. Pastorino, "Drug delivery in cancer therapy", Annual School of the Italian Society of Biomaterials, 15-17 July Ispra (Na), Italy.

Communications presented at international conferences

39. V. I. Troitsky, E. Bernasconi, T. S. Berzina, R. Narizzano, L. Pastorino, V. S. Sivozhelezov and C. Nicolini "Application of monolayer engineering techniques for biocatalysis" The First EL.B.A.- Foresight FORUM on Nanotechnology, 14 – 16 April 1999, Rome, Italy.
40. L. Pastorino, T. S. Berzina, V. I. Troitsky, V. Bavastrello, E. Bernasconi and C. Nicolini, "Application of monolayer engineering for immobilization of penicillin G acylase", LB9 The Ninth International Conference on Organised Molecular Films, August 2000, Potsdam, Germany.
41. L. Pastorino, T. S. Berzina, V. I. Troitsky, E. Bernasconi and C. Nicolini, "Biocatalytic LB assemblies with nanometer scale resolution based on penicillin G acylase", LB9 The Ninth International Conference on Organised Molecular Films, August 2000, Potsdam, Germany.

42. L. Pastorino, V. I. Troitsky, T. S. Berzina, E. Bernasconi and C. Nicolini, "A new approach for the deposition of nanostructured biocatalytic films", EL.B.A.-Max Plank FORUM 2000 on Nanoscale Science and Technology, September 2000, Rome.
43. L. Pastorino, C. Nicolini, "Langmuir-Blodgett films of lipase for biocatalysis", 8th European Conference Organised films, September 2001, Lecce.
44. L. Pastorino, S. Disawal, C. Nicolini, Y. Lvov, V. Erokhin, "Complex catalytic colloids on the basis of firefly luciferase as optical nanosensor platform", EL.B.A.-Max Plank-Forum on Nanoscale Science and Technology, September 2002, Mainz, Germany.
45. F. Caneva Soumetz, M. Giacomini, L. Pastorino, J. B. Phillips, R. A. Brown, C. Ruggiero, "Drug Delivery for Nerve Tissue Regeneration", Fourth IEEE Conference on Nanotechnology, August 2004, Munich, Germany.
46. L. Pastorino, F. Caneva Soumetz, C. Ruggiero, "Layer-by-Layer self assembly for nerve tissue regeneration", International Congress of Nanotechnology 2004, November 2004, San Francisco, USA.
47. L. Pastorino, F. Caneva Soumetz, C. Ruggiero, "Nanofunctionalisation for the Treatment of Peripheral Nervous System Injuries", 27th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2005), September 1 - 4, 2005 - Shanghai, China.
48. L. Pastorino, F. Caneva Soumetz, C. Ruggiero, "Layer by Layer Self-Assembly of Immunoglobulins for Piezoelectric Biosensors", IEEE International Conference of Nano/Micro Engineered and Molecular Systems January 16-19 2007 Bangkok, Thailand.
49. F. Caneva Soumetz, L. Pastorino, C. Ruggiero, "Osteoblast-like cell response to Layer by Layer self assembled biomimetic coatings". Proceedings of the 7th International conference on nanobiotechnology – IEEE-NANO 2007, August 2-5, 2007, Hong Kong.
50. L. Pastorino, F. Caneva Soumetz, C. Ruggiero, "Nanostructured Thin Films for the Development of Piezoelectric Immunosensors", Proceedings of the 29th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (IEEE EMBS 2007), August 23-26, 2007, Lyon, France.
51. P. Arrigo, N. Maggi, M. Giacomini, M. Sturla, F. Caneva Soumetz, L. Pastorino, C. Ruggiero, "A genomic and proteomic based approach to pharmacotherapy for cardiovascular diseases". Proceedings of the 7th International conference on Nano/Molecular Medicine and Engineering (IEEE-NANOMED 2007), August 6-9, Macau, China.
52. S. Erokhina, L. Pastorino, F. Caneva Soumetz, and C. Ruggiero, "Nanoengineered polymeric capsules for cancer therapy". Proceedings of the 7th International conference on Nano/Molecular Medicine and Engineering (IEEE-NANOMED 2007), August 6-9, Macau, China.
53. F. Caneva Soumetz, L. Pastorino, C. Ruggiero, R. Raiteri: Detection of Integrin $\beta 1$ subunit on the surface of MG-63 Human Osteosarcoma Cells by Atomic Force Microscopy. Proceedings of the X Annual Linz Winter Workshop, February 15-19, 2008, Linz, Austria.
54. F. Caneva Soumetz, L. Pastorino, R. Raiteri, and C. Ruggiero, "Functionalised AFM Probes for the Investigation of Integrin Distribution on the Surface of Osteosarcoma-Derived Osteoblasts". Proceedings of the 8th International Conference on Nanotechnology (IEEE-Nano 2008), August 18-21, 2008, Arlington, Texas, USA, pp. 654-656.

55. F. Caneva Soumetz, L. Pastorino, C. Ruggiero, Development of a Piezoelectric Immunosensor for Matrix Metalloproteinase-1 Detection, IEEE Engineering in Medicine and Biology Society 31st Annual Conference (EMBC 2009), Minneapolis, Minnesota, USA, September 2-6 2009.
56. L. Pastorino, S. Erokhina, F. Caneva Soumetz and C. Ruggiero, pH-Triggered Release of Paclitaxel from Nanoengineered Polymeric Capsules, 9th IEEE Nanotechnology Conference (IEEE Nano 2009), Genova, Italy, July 26-30 2009.
57. N. Habibi, F. Caneva Soumetz, L. Pastorino, O. Herrera and C. Ruggiero, Layer by Layer Self Assembly of Polyelectrolytes and S-Layers, 10th IEEE Nanotechnology Conference (IEEE Nano 2010), Seoul, Korea, August 17-20 2010.
58. N. Habibi, F. Caneva Soumetz, M. Giulianelli, L. Pastorino, O. Herrera, F. Sbrana, R. Raiteri and C. Ruggiero, Self-assembly and Recrystallization of Bacterial S-layer Proteins of *Bacillus sphaericus* and *Bacillus thuringiensis* on Silicone, Mica and Quartz Crystal Supports, 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2010), Buenos Aires, Argentina, August 31 - September 4, 2010.
59. O. Herrera, E. Parigi, N. Habibi, L. Pastorino, F. Caneva Soumetz and C. Ruggiero, Development of Nanostructured Magnetic Capsules by means of the Layer by Layer Technique, 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC 2010), Buenos Aires, Argentina, August 31 - September 4, 2010.
60. M. Salerno, F. Caneva-Soumetz, L. Pastorino, N. Patra, A. Diaspro, C. Ruggiero, Osteoblast-like cells adhesion and proliferation on anodic porous alumina substrates, 13th Ceramic, Cells and Tissue congress, Faenza, Italy, 17-20 May 2011.
61. S. Erokhina, L. Pastorino, O. Konovalov, P. Bianchini, A. Diaspro, C. Ruggiero, Permeability variation study in collagen-containing polymeric capsules, 12th European Conference on Organized Films, Sheffield (UK), 17 - 20 July 2011.
62. L. Pastorino, N. Habibi, F. Caneva Soumetz, M. Giulianelli and C. Ruggiero, Polyelectrolyte multilayers for cell and tissue engineering, Tissue and Cell Engineering Society (UK) Annual Meeting 19 - 21 July 2011, Leeds (UK).
63. N. Habibi, L. Pastorino, F. Caneva Soumetz, and C. Ruggiero, Permeability of S-layers coated polyelectrolyte capsules, 11th International Conference on Nanotechnology (IEEE Nano 2011), Portland, Oregon, USA, 15-18 August 2011.
64. N. Habibi, L. Pastorino, and C. Ruggiero, Biomimetic Structures: Incorporation of active bio-molecules in polyelectrolyte shells, 12th IEEE International Conference on Nanotechnology (IEEE-NANO) 20-23 August 2012, Birmingham, United Kingdom.
65. C. Baj-Rossi, E.G. Kilinc, S.S. Ghoreishizadeh, D. Casarino, T. Rezzonico, C. Dehollain, F. Grassi, L. Pastorino, G. De Micheli, S. Carrara, Fabrication and Packaging of a Fully Implantable Biosensor Array, accepted to IEEE BioCAS 2013.
66. M. Giulianelli, L. Pastorino, R. Ferretti, C. Ruggiero, 13th IEEE International Conference on Nanotechnology (IEEE NANO2013) August 5-8, 2013, Beijing, China Biomimetic Polyelectrolyte Multilayer Ultrathin Films to Promote Osseointegration.

Communications presented at national conferences

67. L. Pastorino, F. Caneva Soumetz, S. Erokhina, C. Ruggiero, "Nanostructured capsules for the controlled release of paclitaxel", Atti del primo Convegno Nazionale Bioingegneria, July 3-5, 2008, Pisa, Italy, pp. 683-684.

68. F. Caneva Soumetz , L. Pastorino, C. Ruggiero, "Development of nanostructured biosensors by means of the Layer by Layer Self-Assembly technique", Atti del primo Convegno Nazionale Bioingegneria, July 3-5, 2008, Pisa, Italy, pp. 685-686.
69. L. Pastorino, "Nanotechnology for drug delivery: smart nanoengineered polymeric capsules", Lettura Orizzonte 2020, Terzo Congresso del Gruppo Nazionale di Bioingegneria, June 29-29, 2012, Rome, Italy.
70. L. Pastorino, E. Erokhina, O. Konovalov, V. Erokhin, C. Ruggiero, "Collagen based nano-engineered capsules for smart drug delivery", Lettura Orizzonte 2020, Terzo Congresso del Gruppo Nazionale di Bioingegneria, June 29-29, 2012, Rome, Italy.