

Sara Mantero

Publications

A. International Reviews

A.1 Macchiarini P, Jungebluth P, Go T, Asnaghi MA, Rees LE, Cogan TA, Dodson A, Bellini S, Martorell J, Parnigotto PP, Dickinson S, Hollander A, Mantero S, Conconi MT, Birchall MA. Clinical application of a tissue-engineered airway replacement. **The Lancet**, *Published Online November 19, 2008*

A.2 P Jungebluth, T Go, MD, A Asnaghi, S Bellini, PhD, J Martorell, MD, C Calore, PhD, L Urbani, S Mantero, PhD, H Ostertag, MD, PhD, MT Conconi, PhD, and P Macchiarini, MD, PhD. Structural And Morphological Evaluation Of A New Detergent- Enzymatic Tissue Engineered Tracheal Tubular Matrix. **The Journal of Thoracic and Cardiovascular Surgery**, *in press*

A3. F. ACOCELLA, S. BRIZZOLA, C. VALTOLINA, E. SCANZIANI, F. MARCHESI, **S. MANTERO**, H. GARREAU, M. VERT. *Prefabricated tracheal prosthesis with partial biodegradable materials: a surgical and tissue engineering evaluation in vivo.* [Journal of Biomaterials Science – Polymer Edition](#) (2007), vol. 18 (5): 579-594

A4. **S. MANTERO**, N. SADR, S.A. RIBOLDI, S. LORENZONI, F.M. MONTEVECCHI. *A new electro-mechanical bioreactor for soft tissue engineering.* [Journal of Applied Biomaterials & Biomechanics](#) (2007), vol. 5: 107-116.

A5. S.A. RIBOLDI, N. SADR, L. PIGINI, P. NEUENSCHWANDER, M. SIMONET, P. MOGNOL, M. SAMPAOLESI, G. COSSU, **S. MANTERO**. *Skeletal myogenesis on highly orientated microfibrillar polyesterurethane scaffolds.* [Journal of Biomedical Materials Research - Part A](#) (2007): 1549-3296.

A6. C. ARRIGONI, D. CAMOZZI, B. IMBERTI, **S. MANTERO**, A. REMUZZI. *The effect of sodium ascorbate on the mechanical properties of hyaluronan-based vascular constructs.* [Biomaterials](#) (2006), vol. 27 (4): 623-30.

A7. D. GHEZZI, A. PEDROCCHI, A. MENEGON, **S. MANTERO**, F. VALTORTA, G. FERRIGNO. *PhotoMEA: An opto-electronic biosensor for monitoring in vitro neuronal network activity.* [Biosystems](#) (2006).

A8. M. SAMPAOLESI, S. BLOT, G. D'ANTONA, N. GRANGER, R. TONLORENZI, A. INNOCENZI, P. MOGNOL, J.L. THIBAUD, B.G. GALVEZ, I. BARTHELEMY, L. PERANI, **S. MANTERO**, M. GUTTINGER, O. PANSARASA, RINALDI, M.G. CUSELLA DE ANGELIS, Y. TORRENTE, C. BORDIGNON, R. BOTTINELLI, G. COSSU. (2006). *Mesoangioblast stem cells ameliorate muscle function in dystrophic dogs.* [Nature](#) (2006).

A9. **S. MANTERO**, D. PIURI, S. VESENTINI, F.M. MONTEVECCHI. *Endothelial cell adhesion force estimation at the nanoscale.* [Journal of Applied Biomaterials & Biomechanics](#) (2005), vol. 3 (1): 42-49.

A10. S.A. RIBOLDI, M. SAMPAOLESI, P. NEUENSCHWANDER, G. COSSU, **S. MANTERO**. *Electrospun degradable polyesterurethane membranes: potential scaffolds for skeletal muscle tissue engineering.* [Biomaterials](#) (2005), vol. 26: 4606-15.

A11. A. REMUZZI, **S. MANTERO**, M. COLOMBO, M. MORIGI, E. BINDA, D. CAMOZZI, B. IMBERTI. *Vascular smooth muscle cells on hyaluronic acid: culture and mechanical characterization of an engineered vascular construct.* [Tissue Engineering](#) (2004), vol. 10 (5-6): 699-710.

A12. **S. MANTERO**, I. LONGO, G.B. FIORE, A. SEVERINI. *Hypertermia in the treatment of*

cholangiocarcinoma: development and testing of an endobiliary microwave device. [CardioVascular and Interventional Radiology](#) (2003), vol. 26 (4): 379-385.

A13. A. REDAELLI, S. VESENTINI, M. SONCINI, P. VENA, **S. MANTERO**, F.M. MONTEVECCHI. *Possible role of decorin glycosaminoglycans in fibril to fibril force transfer in relative mature tendons: a computational study from molecular to microstructural level.* [Journal of Biomechanics](#) (2003), vol. 36 (10): 1555-69.

A14. F. BOSCHETTI, **S. MANTERO**, F. MIGLIETTA, M.L. COSTANTINO, F.M. MONTEVECCHI. *An Approach to computer automation of the extracorporeal circulation.* [Computers in Biology and Medicine](#) (2002), vol. 32 (2): 73-83.

A15. **S. MANTERO**, D. PIURI, F.M. MONTEVECCHI, S. VESENTINI, F. GANAZZOL, G. RAFFAINI. *Albumin adsorption onto pyrolytic carbon: a molecular mechanics approach.* [Journal of Biomedical Material Research](#) (2002), vol. 59 (2):329-39.

A16. B. RIVOLTA, F. INZOLI, **S. MANTERO**. *Evaluation of temperature distribution during hypertermic treatment in biliary tumors: a computational approach.* [Journal of Biomechanical Engineering](#) (1999), vol. 121: 141-147.

A17. A. SEVERINI, **S. MANTERO**, M.C. TANZI. *In vivo study of polyurethane-coated Gianturco-Rosh biliary Z-stent.* [Cardiovascular and Interventional Radiology](#) (1999), vol. 22: 510-514.

A18. M. RUNZA, R. PIETRABISSA, **S. MANTERO**, A. ALBANI, V. QUAGLINI, R. CONTRO. *Lumbar dura mater biomechanics: experimental characterization and scanning electron microscopy observations.* [Anesthesia & Analgesia](#) (1999), vol. 88: 1317-21.

A19. R. CHIESA, D. ASTORE, G. PICCOLO, G. MELISSANO, A. JANNELLO, D. FRIGERIO, G. AGRIFOGLIO, F. BONALUMI, G. CORSI, S. COSTANTINI BRANCADORO, C. NOVALI, P. LOCATI, A. ODERO, S. PIRRELLI, M. CUGNASCA, P. BIGLIOLI, A. SALA, G. POLVANI, A. GUARINO, G.M. BIASI, P. MINGAZZINI, M. SCALAMOGNA, **S. MANTERO**, G. SPINA, F. PRESTIPINO. *Fresh and cryopreserved arterial homografts in the treatment of prosthetic graft infection: experience of the Italian vascular homograft group.* [Annals of Vascular Surgery](#) (1998), vol. 12: 457-462.

A20. A. REDAELLI, E. DI MARTINO, **S. MANTERO**. *Optimization of a stentless valve prosthesis based on an analytic parametric model of the aortic valve.* [International Journal of Artificial Organs](#) (1998), vol. 21 (3): 161-170.

A21. E. DI MARTINO, **S. MANTERO**, F. INZOLI, G. MELISSANO, D. ASTORE, R. CHIESA, R. FUMERO. *Biomechanics of abdominal aortic aneurysm in the presence of endoluminal thrombus: experimental and computational study.* [European Journal of Vascular and Endovascular Surgery](#) (1998), vol. 15: 290-299.

A22. E. DI MARTINO, R. PIETRABISSA, **S. MANTERO**. *The computational approach applied to the design and structural verification of a tri-leaflet polymeric heart valve.* [Advance in Engineering Software](#) (1997), vol. 28: 341-346.

A23. **S. MANTERO**, R. PIETRABISSA, A. MOTTA, M. FERRARI, R. BERCHIOLLI. *A new pericardium vascular prosthesis: mechanical behaviour, SEM analyses and clinical indications.* [International Journal of Artificial Organs](#) (1996), vol. 19 (6): 372-378.

A24. R. PIETRABISSA, **S. MANTERO**, T. MAROTTA, L. MENICANTI. *A lumped parameter model to evaluate the fluid dynamics of different coronary bypasses.* [Medical Engineering and Physics](#) (1996), vol. 18 (6): 477-484.

A25. A. SEVERINI, **S. MANTERO**, M.C. TANZI, A. CIGADA, M. SALVETTI, G. COZZI, A. MOTTA. *Polyurethane-coated, self expandable biliary stent: an experimental study.* [Academic Radiology](#) (1995), vol. 2:1078-1081.

A26. M.C. TANZI, **S. MANTERO**, G. FREDDI, A. MOTTA, A. SADA, G. PELUSO. *Cytocompatibility of two segmented biomedical polyurethanes*. [Journal of Material Sciences: Materials in Medicine](#) (1994), vol. 5: 705-710.

A27. E. TARDITO, B. BIONDO, V. CAPUTO, G. FREDDI, E. GROSSO, **S. MANTERO**, A. MOTTA, M.L. REPETTI, M.C. TANZI, L. MATURRI. *Biodegradazione delle protesi vascolari in Dacron. Studio chimico-fisico, istologico, morfometrico e strutturale*. [Minerva Cardioangiologica](#) (1993), vol. 41 (3): 59-80.

A28. E. TARDITO, B. BIONDO, V. CAPUTO, G. FREDDI, E. GROSSO, **S. MANTERO**, A. MOTTA, M.L. REPETTI, L. MATURRI. *Anastomotic disjunction in long-term patent vascular grafts in Dacron*. [The Journal of Cardiovascular Surgery](#) (1993), vol. 35 (5): 369-380.

A29. **S. MANTERO**. *Fenomeni di degradazione delle articolazioni di protesi d'anca e trattamenti superficiali*. [Biomateriali](#) (1992), vol. 1-2: 49-58.

A30. **S. MANTERO**, R. PIETRABISSA, R. FUMERO. *The coronary bed and its role in the cardiovascular system: a review and an introductory single branch model*. [Journal of Biomedical Engineering](#) (1992), vol. 14: 109-116.

A31. R. ANOUCHINSKY, F. BOSCHETTI, **S. MANTERO**, L. SPECIALE, M.C. TANZI. *Innesto di segmenti eparinizzabili su poliuretano-ammidi*. [Biomateriali](#) (1991), vol. 5 (1): 128.

A32. F. PINCIROLI, R. ROSSI, L. VERGANI, P. CARNEVALI, **S. MANTERO**, O. PARIGI. *Remarks and experiments on the construction of respiratory waveforms from electrocardiographic tracing*. [Computers and Biomedical Research](#) (1986), VOL. 19: 391-409.

B. Contributions in international books

B1. **S. MANTERO**, D. PIURI, F.M. MONTEVECCHI, F. GANAZZOLI, G. RAFFAINI. *Molecular model of albumin-pyrolitic carbon interaction*, In [Mechano Transduction 2000 - Engineering and Biological Materials and Structure](#). Ribreau C., Berthaud Y., Moreau M.R., Ratier L., Renaudeau J.P., Thiriet M., Wendling S. (eds.). GAMAC, Paris, 115-162, 2000.

B2. R. PIETRABISSA, **S. MANTERO**, V. QUAGLINI, R. CONTRO. M. RUNZA. *Mechanical properties of lumbar dura mater and biomechanics of spinal anaesthesia procedure*, in J. Middleton, G.N. Pande, K.R. Williams (Eds.), [Computer Methods in Biomechanics & Biomedical Engineering 2](#). Gordon and Breach Science Publishers, Amsterdam, 355-362, 1998.

B3. **S. MANTERO**, E. DI MARTINO, R. PIETRABISSA. *Design of new trileaflet valves: computational mechanical study*, in [Computer Simulation in Biomedicine](#), H. Power & R.T. Hart eds., Computational Mechanics Publication, 549-556, 1995.

B4. F. INZOLI, F. MIGLIAVACCA, **S. MANTERO**. *Pulsatile flow in aorto-coronary bypass 3-D model*, in [Biofluid Mechanics](#), Edt. D. Liepsch, VDI Verlag, Dusseldorf, 455-463, 1994.

C. Contributions in Italian books

C1. A. REMUZZI, **S. MANTERO**. *Ingegneria del tessuto vascolare*, in R. Cancedda, R. Pietrabissa, [Ingegneria dei tessuti biologici](#), Pàtron (ed), Bologna, 255-276, 2002.

C2. F.M. MONTEVECCHI, **S. MANTERO**, S. VESENTINI. *Progettazione biomeccanica dei tessuti*, in R. Cancedda, R. Pietrabissa, [Ingegneria dei tessuti biologici](#), Pàtron (ed), Bologna, 131-155, 2002.

C3. **S. MANTERO**, F.M. MONTEVECCHI, E. REDAELLI, M. SONCINI. *Modelli dinamici di proteine*. In [Analisi e modifica di biomolecole e di cellule](#), Biondi E., Grattarola M., Magenes G., Stefanelli M., Tagliasco V. (eds.). Patron Editore, Bologna, 173-200, 2000.

C4. **S. MANTERO**. *La biocompatibilità delle protesi vascolari*, in [Bioingegneria Vascolare](#). R. Fumero, F. Inzoli, R. Pietrabissa (eds). Patron Editore, Bologna, 121-130, 1998.

C5. **S. MANTERO**, E. DI MARTINO, F. INZOLI. *Biomeccanica dell'aneurisma dell'aorta addominale in presenza di trombo endoluminale*, in F. M. Montevecchi, [Meccanica nei tessuti biologici](#), Pàtron (ed), Bologna, 143-157, 1997.

C6. **S. MANTERO**. *Applicazioni cardiovascolari dei poliuretani termoplastici a segmenti: caratterizzazione, tecnologia e realizzazione di dispositivi*, [Tesi di dottorato di Ricerca in Biomateriali, VI Ciclo](#). Politecnico di Milano, 1993.

C7. M.C. TANZI, L. SPECIALE, **S. MANTERO**, M. LEVI, R. FUMERO. *Poliuretani a segmenti per applicazioni biomediche: sintesi, caratterizzazione e valutazione di emocompatibilità*, in [Omaggio scientifico a Renato Turriziani](#), Vol II, 1992.

D. International congresses Acts

D1. S.A. RIBOLDI, P. MOGNOL, M. SAMPAOLESI, P. NEUENSCHWANDER, **S. MANTERO**, G. COSSU. *Electrospun DegraPol® membranes as scaffolds for skeletal muscle tissue engineering*. Proceedings of the [One-day Symposium "Polymers in life Sciences"](#), Basel, Switzerland, March 31, 2004.

D2. A. REMUZZI, **S. MANTERO**, M. MORIGI, D. CAMOZZI, C. ARRIGONI, B. IMBERTI. *Sodium ascorbate ameliorates mechanical properties of vascular constructs*. [Proceedings of the International Conference "Strategies in Tissue Engineering"](#), Würzburg, Germany, June 17-19, 2004.

D3. S.A. RIBOLDI, M. SAMPAOLESI, P. NEUENSCHWANDER, F.M. MONTEVECCHI, G. COSSU, **S. MANTERO**. *Skeletal Muscle Tissue Engineering – line myoblasts and primary human satellite cells on electrospun DegraPol® scaffolds*. Proceedings of [IUTAM \(International Union of Theoretical and Applied Mechanics\) Symposium on Mechanics of Biological Tissue](#), Graz, Austria, June 27–July 2, 2004.

D4. A. REMUZZI, **S. MANTERO**, M. COLOMBO, S. RIBOLDI, M. MORIGI, D. CAMOZZI, C. ARRIGONI, B. IMBERTI. *Vascular Smooth muscle cells on hyaluronic acid: culture and mechanical characterization of an engineered vascular construct*. 2nd Meeting of the [European Tissue Engineering Society ETES](#), Sept 3-6, Genoa Italy, p.807-8, 2003

D5. A. REDAELLI, S. VESENTINI, M. SONCINI, **S. MANTERO**, F.M. MONTEVECCHI, P. VENA. *A microstructural model of proteoglycan-tendon interaction*. [Fifth World congress on Computational Mechanics](#), Vienna, Austria. July 7-12, 2002.

D6. **S. MANTERO**, S. VESENTINI, D. PIURI, F.M. MONTEVECCHI. *Molecular design of $\alpha_v\beta_3$ integrin links to RGD grafted polyethylene provides the estimation of endothelial cell adhesion force*. In: Proceedings of the [IEEE-EMBS Special Topic Conference on Molecular, Cellular and Tissue Engineering](#), Genoa, Italy, 151, 2002.

D7. S. VESENTINI, A. REDAELLI, M. SONCINI, **S. MANTERO**, F.M. MONTEVECCHI. *Glycosaminoglycan stiffness evaluation by means of molecular mechanics approach for tendon functional analysis*. In: Proceedings of the [IEEE-EMBS Special Topic Conference on Molecular, Cellular and Tissue Engineering](#), Genoa, Italy, 132-134, 2002.

D8. **S. MANTERO**, D. PIURI, S. VESENTINI, F.M. MONTEVECCHI. *Transmembrane adhesion protein and RGD-grafted biomaterial: a molecular approach to estimate cell adhesion strength*. [ECMTB2002, 5Th Conference of the European Society of the mathematical and theoretical Biology](#), Milan, July 2-6, p. 160, 2002.

D9. I. LONGO, E. TOMBARI, N. TOSORATTI, G. BIFFI GENTILI, G. DI CANDIO, F. MOSCA, F. FRANCESCA, A. SEVERINI, **S. MANTERO**. *Sviluppo di una tecnologia a microonde per*

applicazioni chirurgiche miniinvasive. Primi risultati delle attivita' di ricerca in Italia. [Congresso Nazionale della Societa' Italiana di Fisica](#), Alghero, 26/9-1/10/ p. 88, 2002

D10. S. VESENTINI, A. REDAELLI, **S. MANTERO**, M. SONCINI, F.M. MONTEVECCHI. *Proteoglycan role in tendons micromechanics.* [15th AIMETA Congress of Theoretical and Applied Mechanics](#), Taormina, Italy: pg. MS_BIO_03, 2001.

D11. F. MONTEVECCHI, **S. MANTERO**, G. FERRIGNO, M.G. SIGNORINI. *Microtecnologie e progettazione biomolecolare delle interfacce.* In: [Le micro-nano tecnologie nei settori biomedicale, farmaceutico e biotecnologico: la rivoluzione industriale appena iniziata?](#), Vol I, FAST, 9 maggio, 2000.

D12. **S. MANTERO**, F.M. MONTEVECCHI. *Biomaterial endothelization.* *Biomedicine & Pharmacotherapy*, 54 (8-9), 438, 2000. [The vascular endothelium: basic and clinical aspects. Third international Congress](#), Pisa, Italy, October 2-3, 2000.

D13. F.M. MONTEVECCHI, **S. MANTERO**. *Protein adsorption onto biomaterials promotes cell adhesion.* *Biomedicine & Pharmacotherapy*, 54 (8-9), 439, 2000. [The vascular endothelium: basic and clinical aspects. Third international Congress](#), Pisa, Italy, October 2-3, 2000.

D14. **S. MANTERO**, E. DI MARTINO, R. FUMERO. *Rupture risk evaluation of abdominal aortic aneurysm by means of bidimensional pulsatile non linear structural models.* [11 Conference of ESB](#), July 8-11, Toulouse, 17, 1998.

D15. A. DI LEO, P.P. BONFIRRARO, S. VOURTSIS, L. DONATI, R. SFORZA, R. PIETRABISSA, **S. MANTERO**, V. QUAGLINI. *Histologic and biomechanic analysis of periprosthetic tissue in patient with double capsule after augmentation mammoplasty.* [VI Congress of Italian and American Plastic Surgeons](#), Taormina, 19-20 giugno, 122, 1998.

D16. R. PIETRABISSA, **S. MANTERO**, M. RUNZA, V. QUAGLINI, R. CONTRO. *Mechanical properties of lumbar dura mater and biomechanics of spinal anaesthesia procedure.* [3rd Int. Symp. on Comp. Methods in Biomechanics and Biomedical Engineering](#), Barcelona, Spain, May 7-10, 1997.

D17. F. BOSCHETTI, **S. MANTERO**, F. MIGLIAVACCA, F.M. MONTEVECCHI, R. FUMERO. *Simulation of extracorporeal circulation by means of virtual instruments.* [XXIII Congress of ESAO, Warsaw](#), October 17-19, 1996, *Int J. Art. Org.* 19(9), 540, 1996.

D18. A. REDAELLI, **S. MANTERO**, E. DI MARTINO, A. AGAZZI, E. VANGERI, A. GAMBA, R. FUMERO. *Comparison between aortic valve and aortic valve bioprostheses: a biomechanical approach.* [XXIII Congress of ESAO, Warsaw](#), October 17-19, 1996.

D19. **S. MANTERO**, A. MOTTA, R. PIETRABISSA. *Mechanical and SEM evaluation of a new pericardium vascular graft.* [XXII Congress of ESAO](#), Berlin, October 19-21, 1995, *On the International Journal of Artificial Organs*, 18 (8), 437, 1996.

D20. F. BOSCHETTI, **S. MANTERO**, F. MIGLIAVACCA, F.M. MONTEVECCHI, R. FUMERO. *Simulation of extracorporeal circulation by means of virtual instruments.* [XXIII Congress of ESAO, Warsaw](#), October 17-19, 1996.

D21. A. REDAELLI, **S. MANTERO**, E. DI MARTINO, A. AGAZZI, E. VANGERI, A. GAMBA, R. FUMERO. *Comparison between aortic valve and aortic valve bioprostheses: a biomechanical approach.* [XXIII Congress of ESAO, Warsaw](#), October 17-19, 1996.

D22. M.C. TANZI, **S. MANTERO**, P. PETRINI, A.M. GATTI. *Characterization of the bulk properties of solvent-cast biomedical polyurethanes after ethylene oxide and irradiation sterilization,* [21st Annual Meeting of the Society for Biomaterials](#), March 18-22, S.Francisco, 1995.

D23. R. PIETRABISSA, **S. MANTERO**, E. DI MARTINO, R. SESANA. *Different designs of trileaflet valves and mechanical comparison of their closures.* [Proc of the Second World Congress of Biomechanics](#), July 10-15, Amsterdam, 195, 1994.

D24. A. MOTTA, **S. MANTERO**, M.C. TANZI, G. FREDDI, G. PELUSO. *In vitro and in vivo interaction between immunocompetent cells and two biomedical polyurethanes*. Proc of [ICEM 13](#), July 17-22, Paris, 875, 1994.

D25. M.C. TANZI, G. FREDDI, **S. MANTERO**, A. MOTTA, G. PELUSO. *Cytocompatibility of two segmented biomedical polyurethanes*. Proc of the [11th European Conference on Biomaterials](#), ESB, Sept 10-14 Pisa, 212-215, 1994.

D26. M.C. TANZI, **S. MANTERO**, A. MOTTA, A. CIGADA. *Caratterizzazione di materiali polimerici per applicazioni biomediche*. Proc. of [2° Congresso Nazionale sui Materiali per l'Ingegneria \(AIMAT\)](#), Sept 19-21, Trento, 201-209, 1994.

D27. A. SEVERINI, M. BELLOMI, G. COZZI, M. SALVIETTI, A. CIGADA, S. MANTERO, M.C. TANZI. *Polyurethane coated Gianturco Z Stent*. Proc. of the [18th International Congress of Radiology](#), Jan, 23-28, Singapore, S235, 1994.

D28. A. CIGADA, **S. MANTERO**, M.C. TANZI, A. SEVERINI, M. BELLOMI, G. COZZI. *Polyurethane coated expansible biliary stents*. Proc. of the [International Conference on Materials for Biomedical Application](#), June, 6-11, Capri, 73, 1993.

D29. M.C. TANZI, **S. MANTERO**, G. FREDDI, A. MOTTA. *Chemico-physical characterization of polyethylenterephthalate after long-term implantation of Dacron vascular grafts*. Proc of the [Biomaterials and Intelligent Materials, Technological aspects & Medical Applications](#), Sept, 21-26, Brindisi, 166, 1992.

D30. M.C. TANZI, B. BARZAGHI, R. ANOUCHINSKY, L. SPECIALE, **S. MANTERO**. *Heparinizable hydrogels with poly-ether-amidoamine structure*. Proc of the [Fourth World Biomaterials Congress](#), April, 24-28, Berlin, 1992.

D31. **S. MANTERO**, R. PIETRABISSA, R. FUMERO. *Biocompatibilità e emodinamica di protesi valvolari: studio computazionale della sostituzione aortica*. Atti del [3° Congresso Nazionale S.I.B. Biomateriali ed Applicazioni Cliniche](#), May 16-18, Bologna, Italy, Biomateriali, 129, 1991.

D32. F. BOSCHETTI, **S. MANTERO**, F. INZOLI, R. FUMERO. *The influence of biomaterial compliance on anastomosis failure of vascular grafts*. Proc. of the [4th European Symposium on Biomaterials: Industrial and Research Involvement and Relationship](#), April 8-13, Pontignano, Siena, Italy, 99, 1991.

D33. F. PINCIROLI, R. ROSSI, L. VERGANI, P. CARNEVALI, **S. MANTERO**, O. PARIGI. *Estimation of respiratory wave shapes by interpolation of electrical axis angle-values from ambulatory electrocardiograms*. Proc of the [2° International Symposium on Holter Monitoring](#), March 23-25, Jerusalem, 153, 1986.

D34. G.B. MOODY, R.G. MARK, A. ZOCCOLA, **S. MANTERO**. *Derivation of respiratory signal from multi-lead ECGs*. [Computers in Cardiology](#), 113-116, 1985.

E. Invited lectures

E1. **S. MANTERO**, "Ingegnerizzazione biomimetica del tessuto muscolare scheletrico"; [BIOFORUM, Biotecnologie: dove scienza e impresa si incontrano](#). Università degli Studi Milano-Bicocca (Italy). 22-24 Sept. 2004.

E2. **S. MANTERO**, "FAV sempre, se possibile! Quando mancano i vasi nativi.... il futuro: tra speranze, ambizioni e realtà", [Gli Accessi Vascolari per l'Emodialisi. Corso teorico-pratico di 2° livello a cura del Gruppo di Studio degli Accessi Vascolari della Società Italiana di Nefrologia](#). Vietri sul Mare, Savona (Italy), 22-24 Nov. 2004.

E3. **S. MANTERO**, "In mancanza di vasi nativi.... Il futuro: tra speranze, ambizioni e realtà", [Gli Accessi Vascolari per l'Emodialisi. Corso teorico-pratico di 2° livello a cura del Gruppo di Studio](#)

degli Accessi Vascolari della Società Italiana di Nefrologia. Università Cattolica del Sacro Cuore, Roma (Italy), 5-7 Oct. 2004.

E4. **S. MANTERO**, "*Le protesi vascolari: passato, presente, futuro*", Gli Accessi Vascolari per l'Emodialisi. [Corso teorico-pratico di 2° livello a cura del Gruppo di Studio degli Accessi Vascolari della Società Italiana di Nefrologia](#). Università degli Studi di Milano, Bicocca, Facoltà di Medicina e Chirurgia, Milano (Italy), 9-11 June 2004.

E5. **S. MANTERO**, "*Ricostruzione di vasi ematici*", [10° Corso Scuola Biomateriali](#). Ingegneria dei tessuti, cellule staminali e terapia genica. Ischia, Napoli (Italy), July 2003.

E6. **S. MANTERO**, "*Degeneration of biomaterials*", [10° Course of the Italian Urodynamic Society](#), Trieste (Italy), Sept. 17, 2000.

Patents

European patent:

Application No. *PCT/IB03/01620*, 28 aprile 2003

Title: "***Bone prostheses having improved multilayer interface***",

Applicant: *Politecnico di Milano*

Inventors: *Montevecchi F.M., Mantero S., Redaelli A., Soncini M.*

International patent:

Application No. *PCT/IB2006/000180*, 20 gennaio 2006

Title: "***System and method for stimulation and optical surveying in a non invasive manner of the electrical activity of at least a cell***",

Applicant: *Politecnico di Milano*

Inventors: *Ferrigno G., Mantero S., Pedrocchi A., Ghezzi D.*