



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s)	Francesco Di Nardo	
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Nationality	Italian	
Date of birth	13 Oct 1969	
Gender	Male	

Current position

Staff Scientist. Department of Information Engineering, Università Politecnica delle Marche, Ancona, Italy. From December 27, 2005.

Head of Section "Acquisition Systems and Data Processing". Department of Information Engineering, Università Politecnica delle Marche, Ancona. From October 1, 2009.

Lab Manager. Movement analysis and Bioengineering Lab (LAMB), Department of Information Engineering, Università Politecnica delle Marche, Ancona, Italy. From 2012

Professor of "Models and Control of Biological Systems" Master's Degree in Biomedical Engineering, Università Politecnica delle Marche, Ancona, Italy. Since a.y. 2015/2016.

Professor of "Modelli and Controllo di Sistemi Biologi ", Master's Degree in Electronic Engineering, Università Politecnica delle Marche, Ancona, Italy. Since a.y. 2012/2013.

Work experience

Dates	June 2001 - June 2002
Occupation or position held	Fellowship in Bioengineering Main
activities and responsibilities	Research
Name and address of employer	Unità Operativa di Malattie del Ricambio e Diabetologia dell'Istituto Nazionale di Ricovero e Cura dell'Anziano (INRCA) Ancona, Italy
Dates	June 2002 – March 2003
Occupation or position held	Independent Research Collaboration
Position	
Main activities and responsibilities	Research
Name and address of employer	Department of Electronics and Automatics, Università degli Studi di Ancona, Italy
Dates	May 2003 – September 2003
Occupation or position held	Independent Research Collaboration
Position	
Main activities and responsibilities	Research
Name and address of employer	Dipartimento Ricerche Gerontologiche of the Istituto Nazionale di Ricovero e Cura dell'Anziano (INRCA), Ancona, Italy
Dates	September 2003 – December 2005
Occupation or position held	Fixed-Term Staff Scientist
Main activities and responsibilities	Research and teaching
Name and address of employer	Department of Electromagnetics and Bioengineering, Università Politecnica delle Marche, Ancona, Italy
Dates	2000-2002
Occupation or position held	High school teacher (Electronics; Physics)
Main activities and responsibilities	Teaching
Name and address of employer	Istituto Statale di Istruzione Superiore (I.S.I.S.) "M. Laeng" Osimo-Castelfidardo (AN), Italy; Istituto Professionale Industria e Artigianato "B. Padovano" Senigallia (AN), Italy; Istituto Tecnico Nautico Statale "A. Elia" (AN), Italy.

Education and training

Dates 2000
 Title of qualification awarded Master Degree
 Principal subjects / occupational skills covered ElectronicEngineering
 Name and type of organisation providing education and training University of Ancona Ancona, Italy

Dates 2001
 Title of qualification awarded Enabled to the Profession of Engineer
 Principal subjects / occupational skills covered ElectronicEngineering
 Name and type of organisation providing education and training University of Ancona Ancona, , Italy

Dates 2005
 Title of qualification awarded Doctor of Phylosophy (PhD)
 Principal subjects / occupational skills covered Artificial Intelligence Systems
 Name and type of organisation providing education and training Università Politecnica delle Marche, Ancona, Italy

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment
European level ()*

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user

(*) *Common European Framework of Reference (CEF) level*

Additional information

RESEARCH PROJECTS

- Participation in the research activities of the project of national interest "PRIN" 2004. Title of the program carried out by the Unit of the Università Politecnica delle Marche: Evaluation of parameters that characterize the metabolism of glucose, the hemodynamic and autonomic regulation of blood pressure in the study of the correlation between insulin resistance and high blood pressure. 2004-2006.
- Participation in the research activities of the project of national interest "PRIN" 2001. Title of the program carried out by the Unit of the Università Politecnica delle Marche: Assessment of metabolic, hemodynamic and regulatory parameters for the characterization of the link between insulin-resistance and hypertension. 2001-2003.
- Participation in the research activities of the following university (Università Politecnica delle Marche) projects:
 - 2016: Biomechanics and metabolism.
 - 2016: Cardiac fetal signal monitoring.
 - 2015: Movement analysis for motor rehabilitation.
 - 2015: Clinical evaluation of Segmented-beat modulation method.
 - 2014: Biomechanical assessment of Pisa Syndrome.
 - 2013: Movement analysis in Parkinson's disease patients.
 - 2012: Human movement and posture analysis.
 - 2011: Human movement analysis.
 - 2010: Model-based assessment of metabolic and cardiovascular parameters in metabolic syndrome.
 - 2009: Model-based identification of correlations between insulin resistance and hypertension.
 - 2008: Project and clinical/experimental validation of mathematical models for evaluating correlations among insulin resistance, hypertension and cardiac arrhythmia.
 - 2007: Model-based assessment of insulin action and secretion in hypertension.
 - 2004-2006: Signal processing for the characterization of glucose-insulin and cardiovascular systems.
 - 2003: Bioengineering of glucose-insulin and cardiovascular systems.

AWARDS AND RECOGNITIONS

- Certificate for Highly Cited Research in "Journal of Electromyography and Kinesiology" awarded November, 2016, for the paper "Statistical analysis of surface electromyographic signal for the assessment of rectus femoris modalities of activation during gait".
- Certificate of Reviewing for the journal "Biomedical Signal Processing and Control" awarded May, 2016.
- Certificate of Reviewing for the journal "Gait & Posture" awarded July, 2016.

MEMBERSHIP OF SCIENTIFIC ASSOCIATIONS

- Institute of Electrical and Electronics Engineers (IEEE)
- Italian National Group of Bioengineering (GNB)

PUBLICATIONS IN REFERRED JOURNALS

- A Strazza, A Mengarelli, S Fioretti, L Burattini, V Agostini, M Knafnitz, F Di Nardo. Surface-EMG analysis for the quantification of thigh muscle dynamic co-contractions during normal gait. *Gait and Posture* 2017; 51, 228-233.
- A Mengarelli, E Maranesi, L Burattini, S Fioretti, F Di Nardo. Co-contraction activity of ankle muscles during walking: A gender comparison, *Biomedical Signal Processing and Control* 2017, 33:1-9.
- C Giuliani, CA Swenne, S Man, A Agostinelli, S Fioretti, F Di Nardo, L Burattini. Predictive Power of f99 Repolarization Index for the Occurrence of Ventricular Arrhythmias. *Annals of Noninvasive Electrocardiology* 2016;21(2):152-160.
- E Maranesi, F Di Nardo, RA Rabini, GG Ghetti, L Burattini, O Mercante, S Fioretti. Muscle activation patterns related to diabetic neuropathy in elderly subjects: a Functional Reach Test study. *Clinical Biomechanics* 2016, 32: 236-240.
- V Barone, F Verdini, L Burattini, F Di Nardo, S Fioretti. A markerless system based on smartphones and webcam for the measure of step length, width and duration on treadmill. *Methods and Programs in Biomedicine* 2016; 125(37-45).
- F. Di Nardo, A. Mengarelli, L. Burattini, E. Maranesi, V. Agostini, A. Nascimbeni, M. Knafnitz, S. Fioretti. Normative EMG patterns of ankle muscle co-contractions in school-age children during gait. *Gait and Posture* 2016; 46:161-166.
- C. Giuliani, A. Agostinelli, F. Di Nardo, D. Fioretti, L. Burattini, Automatic identification of the repolarization endpoint by computing the dominant T wave on a reduced number of leads. *The Open Biomedical Engineering Journal*, 2016, 10, 43-50.
- A. Agostinelli, A. Sbröllini, C. Giuliani, S. Fioretti, F. Di Nardo, L. Burattini. Segmented Beat Modulation Method for Electrocardiogram Estimation from Noisy Recordings. *Medical Engineering and Physics* 2016, 38:560-568.
- L Burattini, S Man, S Fioretti, F Di Nardo, CA Swenne. Heart-Rate Dependent Hysteresis of T-Wave Alternans in Primary Prevention ICD Patients. *Annals of Noninvasive Electrocardiology* 2016,21(5):460-469.
- E Maranesi, S Fioretti, G G Ghetti, R A Rabini, L Burattini, O Mercante, F Di Nardo (2016). The surface electromyographic evaluation of the Functional Reach in elderly subjects. *Journal Of Electromyography and Kinesiology*, 2016; 26:102-110.
- F. Di Nardo, A. Mengarelli, E. Maranesi, L. Burattini, S. Fioretti. Assessment of the surface electromyographic activity of ankle muscles in males and females. *International Journal of Biomechatronics and Biomedical Robotics*, ahead of print.
- F Di Nardo, A Mengarelli, E Maranesi, L Burattini, S Fioretti. Assessment of the ankle muscle co-contraction during normal gait: a surface electromyography study. *Journal of Electromyography and Kinesiology* 2015, 25(2):347-354.
- F Di Nardo, A Mengarelli, E Maranesi, L Burattini, S Fioretti. Gender differences in the myoelectric activity of lower limb muscles in young healthy subjects during walking. *Biomedical signal processing and control* 2015, 19:14-22.
- F Di Nardo, CE Cogo, E Faelli, M Morettini, L Burattini, P Ruggeri. C-peptide-based assessment of insulin secretion in the Zucker fatty rat: A modelistic study. *PLOS ONE* 2015, 10(5): e0125252 (14 pgg).
- A Agostinelli, M Grillo, A Biagini, C Giuliani, L Burattini, S Fioretti, F Di Nardo, SR Giannubilo, A Ciavattini, L Burattini. Noninvasive fetal electrocardiography: an overview of the signal electrophysiological meaning, recording procedures and processing techniques. *Annals of Noninvasive Electrocardiology* 2015, 20(4):303-313.
- L Burattini, S Man, S Fioretti, F Di Nardo, CA Swenne. Dependency of Exercise-Induced T-Wave Alternans Predictive Power for the Occurrence of Ventricular Arrhythmias from Heart Rate. *Annals of Noninvasive Electrocardiology* 2015, 20(4):345-354.
- F Di Nardo, E Maranesi, L Burattini, S Fioretti. Assessment of the variability of vastii myoelectric activity in young healthy females during walking: a statistical gait analysis. *Journal of Electromyography and Kinesiology* 2015; 25:800-807.
- F Di Nardo, A Mengarelli, E Maranesi, L Burattini and S Fioretti. Assessment of the surface electromyographic activity of thigh muscles in males and females. *International Journal of Biomechatronics and Biomedical Robotics*, 2015; 3 (3):159-168. DOI: <http://dx.doi.org/10.1504/IJBBR.2015.079329>.
- E Maranesi, F Di Nardo, GG Ghetti, L Burattini and S Fioretti. A biomechanical model for the evaluation by electrogoniometry of spatio-temporal parameters during walking. *International Journal of Biomechatronics and Biomedical Robotics*, 2015; 3 (3):129-137. DOI: <http://dx.doi.org/10.1504/IJBBR.2015.079328>

- L Burattini, G Ottaviano, F Di Nardo, S Fioretti. Adaptive Match-Filtering: a Biomedical Application to Identify T-Wave Alternans. *Natural Science*, 2014, 6, 709-718.
- C Giuliani, A Agostinelli, S Fioretti, F Di Nardo, L Burattini, Abnormal Repolarization in the Acute Myocardial Infarction Patients: A Frequency-Based Characterization, *The Open Biomedical Engineering Journal*, 2014, 8:42-51.
- F Di Nardo, G Ghetti, S Fioretti. Assessment of the activation modalities of gastrocnemius lateralis and tibialis anterior during gait: a statistical analysis. *J Electromyogr Kinesiol*, 2013;23:1428-33.
- F Di Nardo, M Mengoni, M Morettini. MATLAB-implemented estimation procedure for model-based assessment of hepatic insulin degradation from standard intravenous glucose tolerance test data. *Comput Methods Programs Biomed*. 2013;110:215-225.
- F Di Nardo, S Fioretti. Statistical analysis of surface electromyographic signal for the assessment of rectus femoris modalities of activation during gait. *J Electromyogr Kinesiol*. 2013;23:56-61.
- R Burattini, M Morettini, F Di Nardo, M Boemi. Dynamics of insulin action in hypertension: assessment from minimal model interpretation of intravenous glucose tolerance test data. *Med Biol Eng Comput*. 2011;49:831-841.
- F Di Nardo, M Boemi, R Burattini. Assessment of hepatic insulin degradation, in normoglycemic hypertensive patients, by minimal modelling of standard intravenous glucose tolerance test data. *Comput Methods Programs Biomed*. 2010; 97:189-198.
- F Di Nardo, R Burattini, CE Cogo, E Faelli, P Ruggeri. Age-related analysis of insulin resistance, body weight and arterial pressure in the Zucker fatty rat. *Exp Physiol*. 2009; 94:162-168.
- R Burattini, F Di Nardo, F Casagrande, M Boemi, P Fumelli, P Morosini. Insulin action and secretion in hypertension, in the absence of metabolic syndrome: model-based assessment from oral glucose tolerance test. *Metabolism*. 2009; 58:80-92.
- 2006
- R Burattini, F Di Nardo, M Boemi, P Fumelli. Deterioration of insulin sensitivity and glucose effectiveness with age and hypertension. *Am J Hypertens*. 2006; 19:98-102.
- F Di Nardo, F Casagrande, M Boemi, P Fumelli, P Morosini, R Burattini. Insulin resistance in hypertension quantified by oral glucose tolerance test: comparison of methods. *Metabolism*. 2006; 55:143-150.
- P Ruggeri, A Brunori, CE Cogo, D Storace, F Di Nardo, R Burattini. Enhanced sympathetic reactivity associates with insulin resistance in the young Zucker rat. *Am J Physiol Regul Integr Comp Physiol*. 2006; 291:R376-382.

ABSTRACTS IN REFERRED JOURNALS

- A Mengarelli, F Di Nardo, G Ghetti, S Fioretti. Statistical analysis of myoelectric activity of tibialis anterior during gait. *SIAMOC 2013 abstracts / Gait & Posture* 40 (2014) S1–S31.
- R Burattini, F Di Nardo, F Casagrande, P Cerasa, M Boemi, P Morosini. Beta-cell responsivity versus insulin sensitivity in hypertension evaluated by minimal models and oral glucose tests. *Diabetes & Vascular Disease Research*. 2006;3:131.
- P Ruggeri, A Brunori, CE Cogo, D Storace, F Di Nardo, R Burattini. Somatosympathetic reflexes are enhanced in insulin resistant, hyperinsulinaemic Zucker rats. *Acta Physiologica*. 2006;188 (S652): 198-199.
- P Ruggeri, A Brunori, CE Cogo, D Storace, F Di Nardo, R Burattini. Severe insulin resistance does not associate with hypertension in the young homozygote Zucker rat. *Acta Physiologica*. 2006; 188 (S652): 153.
- P Ruggeri, CE Cogo, A Brunori, E Faelli, F Di Nardo, R Burattini. Vascular reactivity in young hyperinsulinemic insulin-resistant Zucker rats. *Clinical Autonomic Research*. 2006 16: 168-169.

CHAPTERS ON INTERNATIONAL BOOKS

- A Agostinelli, C Giuliani, S Fioretti, F Di Nardo, L Burattini. A new segmented-beat modulation algorithm for maternal ECG estimation from abdominal recordings. *Selected papers from the International Workshop on Mobile Networks for Biometric Data Analysis*, 2014; Ancona; Italy; 30 October 2014 through 31 October 2014; *Lecture Notes in Electrical Engineering*, 392, 2016, 247-258.
- A Mengarelli, E Maranesi, L Burattini, S Fioretti, F Di Nardo. sEMG-based evaluation of muscle recruitment variability during walking in terms of activation length and occurrence frequency. *Selected papers from the International Workshop on Mobile Networks for*

Biometric Data Analysis, 2014; Ancona; Italy; 30 October 2014 through 31 October 2014; Lecture Notes in Electrical Engineering, 392, 2016,189-203.

- E Maranesi, M Morettini, A Agostinelli, C Giuliani, F Di Nardo, L Burattini. Health monitoring in sport through wearable sensors: A novel approach based on heart-rate variability. Selected papers from the International Workshop on Mobile Networks for Biometric Data Analysis, 2014; Ancona; Italy; 30 October 2014 through 31 October 2014; Lecture Notes in Electrical Engineering, 392, 2016, 235-246.
- E Maranesi, M Petrini, GG Ghetti, O Mercante, V Barone, L Burattini, F Di Nardo, S Fioretti. A method for computing the Functional Ambulation Profile score by stereophotogrammetric data. Selected papers from the International Workshop on Mobile Networks for Biometric Data Analysis, 2014; Ancona; Italy; 30 October 2014 through 31 October 2014; Lecture Notes in Electrical Engineering, 392, 2016, 285-298.
- V Barone, F Verdini, F Di Nardo, E Maranesi, L Burattini, S Fioretti. Webcam and smartphone for the measure of spatial-temporal parameters of gait for treadmill use. Selected papers from the International Workshop on Mobile Networks for Biometric Data Analysis, 2014; Ancona; Italy; 30 October 2014 through 31 October 2014; Lecture Notes in Electrical Engineering, 392, 2016, 261-272.
- E Maranesi, S Fioretti, V Barone, GG Ghetti, O Mercante, RA Rabini, L Burattini, F Di Nardo. The wireless surface electromyographic technique for supporting the assessment of fall risk in diabetic neuropathic patients. Selected papers from the International Workshop on Mobile Networks for Biometric Data Analysis, 2014; Ancona; Italy; 30 October 2014 through 31 October 2014; Lecture Notes in Electrical Engineering, 392, 2016, 273-284.
- R Burattini, F Casagrande, F Di Nardo, M Boemi, P Morosini. Insulin sensitivity and plasma glucose appearance profile by oral minimal model in normotensive and normoglycemic humans, in Biological and Medical Analysis, Editors: N Maglaveras, I Chouvarda, V Koutkias, R Brause, Springer-Verlag – Berlin Heidelberg, Germany, 2006; 128-136.
- F Di Nardo, F Casagrande, F Carle, M Boemi, P Fumelli, P Morosini, R Burattini. Evaluation of insulin sensitivity from a minimal model adapted to oral glucose tests, in Modelling in Medicine and Biology VI, Editors: M Ursino, CA Brebbia, G Pontrelli and E Magosso, WIT Press – Southampton 2005; 67-76.

CONFERENCE PROCEEDINGS

- F Di Nardo, A Mengarelli, A Strazza, E Maranesi, L Burattini, S Fioretti. Are the rectus femoris and the vastus lateralis concurrently recruited during walking? IFMBE proceedings of the 14th Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON 2016, Paphos, Cyprus; 31 March- 2 April 2016, 57: 42-45.
- M Morettini, F Di Nardo, CE Cogo, E Faelli, S Fioretti, L Burattini, P Ruggeri. The relative role of insulin action and secretion in experimental animal models of metabolic syndrome, IFMBE proceedings of the 14th Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON 2016, Paphos, Cyprus, ; 31 March- 2 April 2016, 57: 549-542.
- F Di Nardo, M Morettini, CE Cogo, E Faelli, S Fioretti, L Burattini, P Ruggeri. Estimation of first-phase insulin secretion in the Zucker Fatty Rat , IFMBE proceedings of the 14th Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON 2016, Paphos, Cyprus, ; 31 March- 2 April 2016, 57:545:548.
- A Agostinelli, C Giuliani, S Fioretti, F Di Nardo, L Burattini. Robustness of the segmented-beat modulation method to noise. Computing in Cardiology 2016, 42:205-208.
- C Giuliani, CA Swenne, S Man, A Agostinelli, S Fioretti, F Di Nardo, L Burattini. Logistic Regression to Enhance Risk Assessment by Left Ventricular Ejection Fraction and f99. Computing in Cardiology 2016, 42:657-660.
- L Burattini, S Man, S Fioretti, F Di Nardo, CA Swenne. T-Wave Alternans Hysteresis on Heart Rate. Computing in Cardiology 2016, 42:1205-1208.
- A Strazza, MS Palmieri, A Mengarelli, S Fioretti, L Burattini, O Orsini, A Bortone, F Di Nardo. Activation pattern of Extensor digitorum brevis muscle during child walking, In Proceeding of the 8th International workshop on Biosignal Interpretation (BSI), Osaka, Giappone, 1-3/11/2016.
- D Nepi, A Agostinelli, E Maranesi, A Sbröllini, M Morettini, F Di Nardo, S Fioretti, L Burattini. On the Heart-Rate Signal Provided by the Zephyr BioHarness 3.0, In Proceeding of the 8th International workshop on Biosignal Interpretation (BSI), Osaka, Giappone, 1-3/11/2016.
- A Sbröllini, A Agostinelli, F Di Nardo, E Maranesi, A Mengarelli, S Fioretti, L Burattini. Evaluation of the Low-Frequency Components in Surface Electromyography. Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Orlando, Florida (USA), August 16-20, 2016. PP: 3622-3625.

- A Mengarelli, S Cardarelli, F Verdini, L Burattini, S Fioretti, F Di Nardo. A MATLAB-based graphical user interface for the identification of muscular activations from surface electromyography signals. Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Orlando, Florida (USA), August 16-20, 2016, PP: 3646-3649.
- A Mengarelli, A Strazza, A Sbröllini, A Agostinelli, L Burattini, S Fioretti, F Di Nardo. Co-activation periods of Gastrocnemius and Vastus Lateralis during walking evaluated by surface electromyography. Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Orlando, Florida (USA), August 16-20, 2016: PP:3696-3699.
- A Strazza, A Mengarelli, V Agostini, M Knaflitz, L Burattini, S Fioretti, F Di Nardo. Dynamic knee muscles co-contraction quantified during walking. Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Orlando, Florida (USA), August 16-20, 2016.
- M Morettini, F Di Nardo, C Cogo, E Faelli, S Fioretti, L Burattini, P Ruggeri. Estimation of Second-Phase Insulin Secretion in the Zucker Fatty Rat. Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Orlando, Florida (USA), August 16-20, 2016.
- V Agostini, F Di Nardo, S Fioretti, L Burattini, S Rosati, G Balestra, M Knaflitz. Frequency-of-occurrence of myoelectric patterns to evaluate gait motor control strategies after hip replacement surgery. Proceedings of the 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Orlando, Florida (USA), August 16-20, 2016.
- A Agostinelli, F Palmieri, A Biagini, A Sbröllini, L Burattini, F Di Nardo, S Fioretti, L Burattini. Relationship between Deceleration Areas in the Second Stage of Labor and Neonatal Acidemia. Computing in Cardiology 2016, 43:
- D Nepi, A Sbröllini, A Agostinelli, E Maranesi, F Di Nardo, S Fioretti, P Pierleoni, L Pernini, S Valenti, L Burattini. Validation of the Heart-Rate Signal Provided by the Zephyr BioHarness 3.0. Computing in Cardiology 2016, 43:
- A Agostinelli, C Giuliani, S Fioretti, F Di Nardo, and L Burattini, The Segmented-Beat Modulation Method for ECG Estimation, Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:2856-2859.
- E Maranesi, L Capitanelli, M Capecci, GG Ghetti, O Mercante, F Di Nardo, L Burattini, MG Ceravolo and S Fioretti. A stereophotogrammetric-based method to assess spatio-temporal gait parameters on healthy and Parkinsonian subjects. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:5501-5504.
- E Maranesi, F Di Nardo, GG Ghetti, O Mercante, RA Rabini, L Burattini and S Fioretti. Assessment of the activation patterns of the muscles involved in the FR test in diabetic neuropathic patients. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:6062-6065.
- E Cippitelli, S Gasparri, S Spinsante, E Gambi, F Verdini, L Burattini, F Di Nardo, S Fioretti. Validation of an Optimized Algorithm to use Kinect in a Non-Structured Environment for Sit-to-Stand Analysis. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:5078-5081.
- F Di Nardo, V Agostini, M Knaflitz, A Mengarelli, E Maranesi, L Burattini, S Fioretti. The Occurrence Frequency: A Suitable Parameter for the Evaluation of the Myoelectric Activity during Walking. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:6070-6073.
- A Mengarelli, E Maranesi, V Barone, L Burattini, S Fioretti, F Di Nardo. Evaluation of gender-related differences in co-contraction activity of shank muscles during gait. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:6066-6067.
- V Agostini, A Nascimbeni, F Di Nardo, S Fioretti, L Burattini, M Knaflitz. Dependence of gait parameters on height in typically developing children. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. PP:7598-7601.

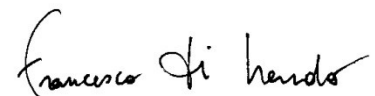
- V Barone V, F Verdini, F Di Nardo, L Burattini, S Fioretti. A System Line Lasers and One Webcam for 3D Reconstruction: a Feasibility Study. Proceedings of the 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society of the IEEE Engineering in Medicine and Biology Society, Milano, Italy, August 25-29, 2015. (1 Page proceeding) NI
- A Mengarelli, S Fioretti, E Maranesi, L Burattini, F Di Nardo, V Agostini, M Knafitz, A Nascimbeni. Comparison of ankle-muscles activity between school-aged children and young adults during gait: an electromyographic analysis. In 12th International Workshop on Intelligent Solutions in Embedded Systems, WISES 2015, pp 167-170, 29-30/10/2015 Ancona, Italy.
- F Di Nardo, A Mengarelli, E Maranesi, L Burattini, S Fioretti, V Agostini, M Knafitz, A Nascimbeni. Myoelectric activity of antagonist ankle-muscles in 6-to-8-year-old children during walking. In 12th International Workshop on Intelligent Solutions in Embedded Systems, WISES 2015, pp 163-166, 29-30/10/2015 Ancona, Italy.
- A Agostinelli, S Fioretti, F Di Nardo, L Burattini. Clinical application of the Segmented-Beat Modulation Method for fetal ECG extraction. In 12th International Workshop on Intelligent Solutions in Embedded Systems, WISES 2015, pp 35-40, 29-30/10/2015 Ancona, Italy.
- L Burattini, A Agostinelli, E Maranesi, A Sbrillini, S Fioretti, F Di Nardo. Cleaning the electrocardiographic signal from muscular noise. In 12th International Workshop on Intelligent Solutions in Embedded Systems, WISES 2015, pp 57-61, 29-30/10/2015 Ancona, Italy.
- L Burattini, A Agostinelli, S Fioretti, F Di Nardo, S Man, CA Swenne. Heart-rate dependency of T-wave alternans during the exercise and recovery. In 12th International Workshop on Intelligent Solutions in Embedded Systems, WISES 2015, pp 51-55, 29-30/10/2015 Ancona, Italy.
- L Burattini, S Man, G. Ottaviano, S Fioretti, F Di Nardo, CA Swenne, T-wave alternans rate of change with exercise for cardiac risk assessment, Computing in Cardiology 2014, 41:177-180.
- F Di Nardo, A Mengarelli, E Maranesi, L Burattini and S Fioretti. Influence of gender on the myoelectric signal of thigh muscles. Published in: 2014 IEEE/ASME 10th International Conference on Mechatronic and Embedded Systems and Applications (MESA2014), Senigallia, Italy, 10-12 Settembre 2014. Pg. 1-4.
- F Di Nardo, A Mengarelli, E Maranesi, L Burattini and S Fioretti Influence of gender on the myoelectric signal of shank muscles. Published in: 2014 IEEE/ASME 10th International Conference on Mechatronic and Embedded Systems and Applications (MESA2014), Senigallia, Italy, 10-12 Settembre 2014. Pg. 1-4.
- E Maranesi, F Di Nardo, G Ghetti, L Burattini, S Fioretti A goniometer-based method for the assessment of gait parameters. Published in: 2014 IEEE/ASME 10th International Conference on Mechatronic and Embedded Systems and Applications (MESA2014), Senigallia, Italy, 10-12 Settembre 2014. Pg. 1-4.
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