

PUBLICATIONS

1993

- G. Pagnacco, “**Simulazione numerica del sistema guidatore-veicolo in condizioni di impatto**” (**Numerical simulation of the system driver-vehicle in impact conditions**)”, Tesi di Laurea (B.S./M.S. Thesis), Politecnico di Torino, Italy, 1993.

1997

- N. Berme, E. Oggero, G. Pagnacco, “**Characteristics of human locomotion**” in “Human and machine locomotion” A. Morecki and K. J. Waldron Ed.; Springer-Verlag, 1997, ISBN 3-211-82905-9; pp. 79-86.
- N. Berme, E. Oggero, G. Pagnacco, “**Modeling and simulation of human locomotion**” in “Human and machine locomotion” A. Morecki and K. J. Waldron Ed.; Springer-Verlag, 1997, ISBN 3-211-82905-9; pp. 87-105.
- S. Z. Barnes, D. R. Morr, E. Oggero, G. Pagnacco, N. Berme, “**The realization of a haptic (force feedback) interface device for the purpose of angioplasty surgery simulation**”, Biomedical Sciences Instrumentation, 1997, Vol. 33, pp. 19-24.
- E. Oggero, G. Pagnacco, D. R. Morr, S. Z. Barnes, N. Berme, “**The mechanics of drop landing on a flat surface – A preliminary study**”, Biomedical Sciences Instrumentation, 1997, Vol. 33, pp. 53-58.
- S. Z. Barnes, E. Oggero, G. Pagnacco, N. Berme, “**Simulation of human movement: goals, model formulation, solution techniques, and considerations**” in “Three-dimensional analysis of human locomotion” P. Allard et al. Ed., John Wiley & Sons, Ltd., 1997, ISBN 0471969494; pp. 281-306.

1998

- G. Pagnacco, D. Sorbello, E. Oggero, D. R. Morr, N. Berme, “**Average power spectral density of physiological tremor in normal subjects**”, Biomedical Sciences Instrumentation, 1998, Vol. 34, pp. 99-103.
- G. Pagnacco, E. Oggero, D. R. Morr, N. Berme, “**Oversampling data acquisition to improve resolution of digitized signals**”, Biomedical Sciences Instrumentation, 1998, Vol. 34, pp. 137-142.
- E. Oggero, G. Pagnacco, D. R. Morr, S. R. Simon, N. Berme, “**Probability of valid gait data acquisition using currently available force plates**”, Biomedical Sciences Instrumentation, 1998, Vol. 34, pp. 392-397.
- A. Mugnai, E. Oggero, G. Pagnacco, S. R. Simon, N. Berme, “**Human foot modeling: a new approach using MADYMO**” 7th International MADYMO Users’ Conference, Windsor CANADA, 5 June, 1998, pp. 60-67.
- E. Oggero, G. Pagnacco, D. R. Morr, S. R. Simon, N. Berme, “**Collecting valid data from force plates: how many subjects must alter their gait?**”, III North American Congress On Biomechanics, Waterloo Canada, Aug. 14-18 1998, pp. 147-148.
- G. Pagnacco, E. Oggero, D. R. Morr, N. Berme, “**Benefit of a software implemented oversampling technique for acquisition of force plate data**”, III North American Congress On Biomechanics, Waterloo Canada, Aug. 14-18 1998, pp. 191-192.
- G. Pagnacco, D. Sorbello, E. Oggero, D. R. Morr, N. Berme, “**Tremor in normal subjects: spectral characteristics**”, III North American Congress On Biomechanics, Waterloo Canada, Aug. 14-18 1998, pp. 283-284.
- G. Pagnacco, E. Oggero, N. Berme, “**Miglioramento della risoluzione di segnali digitati attraverso l’impiego del sovraccampionamento realizzato in software**”, XXVII Convegno Nazionale dell’Associazione Italiana per l’Analisi delle Sollecitazioni, Perugia Italy, Sept. 9-11 1998, pp. 963-972.
- G. Pagnacco, D. Sorbello, E. Oggero, N. Berme, “**Analisi spettrale della forza di reazione verticale generata dal tremore fisiologico in soggetti normali**”, XXVII Convegno Nazionale dell’Associazione Italiana per l’Analisi delle Sollecitazioni, Perugia Italy, Sept. 9-11 1998, pp. 973-982.
- G. Pagnacco, D. Sorbello, E. Oggero, N. Berme, “**Quantification of physiological tremor in normal subjects using force plates**”, VIII International IMEKO Conference on Measurement in Clinical Medicine, Dubrovnik Croatia, Sept. 16-19 1998, pp. 2.18-2.21.
- G. Pagnacco, E. Oggero, N. Berme, “**A software technique for high resolution data acquisition**”, VIII International IMEKO Conference on Measurement in Clinical Medicine, Dubrovnik Croatia, Sept. 16-19 1998, pp. 3.144-3.147.

- N. Berme, E. Oggero, G. Pagnacco, "Frequency of movement perturbation in standing posture", XI International Biomechanics Seminar, Wroclaw Poland, Sept. 18-19, 1998, pp 107-120.
- 1999**
- E. Oggero, G. Pagnacco, D. R. Morr, N. Berme, "How force plate size influences the probability of valid gait data acquisition", Biomedical Sciences Instrumentation, 1999, Vol. 35, pp. 3-8.
- G. Pagnacco, E. Oggero, P. F. O'Reilly III, M. J. Warnecke, N. Berme, "Design and testing of a 6-component ballistocardiographic bed", Biomedical Sciences Instrumentation, 1999, Vol. 35, pp. 57-62.
- G. Pagnacco, E. Oggero, P. F. O'Reilly III, N. Berme, "Effects of body position on physiologic tremor characteristics in normal subjects", XVII International Society of Biomechanics Congress, Calgary Canada, Aug. 8-13 1999, pp. 781.
- N. Berme, E. Oggero, G. Pagnacco, "Power spectrum characteristics of physiologic and pathologic tremor", Acta of Bioengineering and Biomechanics, 1999, Vol. 1(1), pp. 71-88.
- 2000**
- E. Oggero, M. Pipino, R. Deweese, A. Mugnai, B. Aljundi, G. Pagnacco, "Numerical simulation of a child restraint system in an aircraft crash-test", Biomedical Sciences Instrumentation, 2000, Vol. 36, pp. 257-262.
- G. Pagnacco, A. Silva, E. Oggero, N. Berme, "Inertially compensated force plate: a means for quantifying subject's ground reaction forces in non-inertial conditions", Biomedical Sciences Instrumentation, 2000, Vol. 36, pp. 397-402.
- G. Pagnacco, "Vertical Ground Reaction Force in the Assessment of Human Postural Balance" Ph.D. Dissertation, The Ohio State University, 2000.
- 2001**
- D.G. Heiss, G. Pagnacco, "The effect of practice schedule on lifting unexpected loads", Journal of Orthopaedic & Sport Physical Therapy, 2001, Vol. 31, pp. A-19.
- E. Oggero, G. Pagnacco, N. Berme, G. L. Kinzel, A. F. Luscher, "Force Transducer Design: a new approach combining nonlinear finite element analysis and robust design", Biomedical Sciences Instrumentation, 2001, Vol. 37, pp. 49-54.
- G. Pagnacco, D.G. Heiss, E. Oggero, "Muscular contractions and their effect on the vertical ground reaction force during quiet stance – Part I: hypothesis and experimental investigation", Biomedical Sciences Instrumentation, 2001, Vol. 37, pp. 227-232.
- G. Pagnacco, D.G. Heiss, E. Oggero, "Muscular contractions and their effect on the vertical ground reaction force during quiet stance – Part II: mathematical model", Biomedical Sciences Instrumentation, 2001, Vol. 37, pp. 233-238.
- 2002**
- D.G. Heiss, G. Pagnacco, "Effect of Center of Pressure and Trunk Center of Mass Optimization Methods on the Analysis of Whole Body Lifting Mechanics", Clinical Biomechanics, 2002; Vol. 17, pp. 106-115, doi:10.1016/S0268-0033(01)00114-0
- G. Pagnacco, D.G. Heiss, E. Oggero, J.A. Buford, "Trunk muscle EMG linked to the cardiac cycle during quiet standing is not all ECG artifact", abstracts of the Combined Sections Meeting of the American Physical Therapy Association, Boston, MA, February 2002 appearing in Journal of Orthopaedic & Sports Physical Therapy, 2002; Vol. 32, pp. A35-36.
- 2006**
- F.R. Carrick, E. Oggero, G. Pagnacco, J.B. Brock, T. Arikan, "Posturographic testing and motor learning predictability in gymnasts", Europa Medicophysica - Mediterranean Journal of Physical and Rehabilitation Medicine, Sept. 2006; Vol. 42, No. 3, Suppl. 1; pp. 80-82
- F.R. Carrick, E. Oggero, G. Pagnacco, "Balance impairment and music therapy: posturographic changes associated with the Nolwenn effect", Europa Medicophysica - Mediterranean Journal of Physical and Rehabilitation Medicine, Sept. 2006; Vol. 42, No. 3, Suppl. 1; pp. 82-83
- 2007**
- F.R. Carrick, E. Oggero, G. Pagnacco, "Posturographic changes associated with music listening", Journal of Alternative and Complementary Medicine, 2007, Vol. 13, No. 5, pp. 519-26, doi:10.1089/acm.2007.7020

F.R. Carrick, E. Oggero, G. Pagnacco, J.B. Brock, T. Arikan, “**Posturographic testing and motor learning predictability in gymnasts**”, Disability and Rehabilitation, 2007; Vol. 29, No. 24, pp. 1881-9, Epub 2007 Feb 9, doi:10.1080/09638280601141335

2008

G. Pagnacco, E. Oggero, F.R. Carrick, “**Repeatability of posturographic measures of the mCTSIB static balance tests – a preliminary investigation**”, Biomedical Sciences Instrumentation, 2008, Vol. 44, pp. 41-46.

2011

G. Pagnacco, E. Oggero, C.H.G. Wright, “**Biomedical instruments versus toys: a preliminary comparison of force platforms and the Nintendo Wii Balance Board**”, Biomedical Sciences Instrumentation, 2011, Vol. 47, pp. 12-17

R.W. Geib, H. Li, E. Oggero, G. Pagnacco, P. Lam, M. Moga, G. Waite, “**Using Computerized Posturography to Explore the Connection Between BMI and Postural Stability in Long-Term Tai Chi Practitioners**”, Biomedical Sciences Instrumentation, 2011, Vol. 47, pp. 288-293.

P.B. Pascolo and G.Pagnacco, “**Subjectivity of typical experiments used to investigate the existence of mirror neurons**”, Biomedical Sciences Instrumentation, 2011, Vol. 47, pp. 294-299.

F.R. Carrick, G. Pagnacco, E. Oggero, S. Sullivan, D. Barton, S. Esposito, G. Leisman, R. Melillo, “**The effects of whole body Rotations in the pitch and yaw planes on postural stability**”, Functional Neurology, Rehabilitation, and Ergonomics, 2011, Vol. 1 No. 2, pp. 167-179.

R. Donatelli, K. Carp, G. Pagnacco, J. Adams, “**Original research: Skill level and balance in golf**”, Lower Extremity Review, July 2011.

P.B. Pascolo, G. Pagnacco, R. Rossi, “**Human standing posture: mathematical models, their biofidelity and applications**”, in “*Posture: Types, Assessment, and Control*” Nova Science Publishers, New York, 2011, pp. 1-34.

R. Geib, H. Li, E. Oggero, G. Pagnacco, P. Lam, P. Kalsaria, M.M. Moga, G. N. Waite, “**Fall prevention in overweight and obese populations: Are mindfulness-based exercise activities effective**”, 139st APHA Annual Meeting and Exposition, 2011.

2012

E. Oggero, R. Rossi, P.B. Pascolo, G. Pagnacco, “**A novel methodology to evaluate the psychophysical condition of individuals performing at-risk activities**”, Biomedical Sciences Instrumentation, 2012, Vol. 48, pp. 316-23.

G. Pagnacco, F.R. Carrick, P.B. Pascolo, R. Rossi, E. Oggero, “**Learning effect of standing on foam during posturographic testing – Preliminary findings**”, Biomedical Sciences Instrumentation, 2012, Vol. 48, pp. 332-9.

2013

E. Oggero, F.R. Carrick, G. Pagnacco, “**Frequency content of standard posturographic measures**”, Biomedical Sciences Instrumentation, 2013, Vol. 49, pp. 48-53.

R.W. Geib, B.L. Roberts, H. Li, G. Waite, G. Pagnacco, E. Oggero, “**Using posturography to assess expertise among Tai Chi practitioners**”, Biomedical Sciences Instrumentation, 2013, Vol. 49, pp. 195-200.

F.R. Carrick, G. Pagnacco, E. Oggero, S.E. Esposito, J.L. Duffy, D. Burton, M. Antonucci, J. Shores, D.M. Stephens, “**The effects of Off Vertical Axis and Multiplanar Vestibular Rotational Stimulation on Balance Stability and Limits of Stability**”, Functional Neurology, Rehabilitation, and Ergonomics, 2013, Vol. 3 No. 2-3, pp. 341-360.

2014

G. Pagnacco, M.W. Bundle, F.R Carrick, C.H.G. Wright, E. Oggero, “**On "Comparison of a laboratory grade force platform with a Nintendo Wii Balance Board on measurement of postural control in single-leg stance balance tasks" by Huurnink, A., et al. [Journal of Biomechanics 46 (2013) 1392-1395]: are the conclusions stated by the authors justified?**”, Journal of Biomechanics, 2014, Vol. 47, pp. 759-760, doi:10.1016/j.jbiomech.2013.06.039

G. Pagnacco, F.R. Carrick, C.H.G. Wright, E. Oggero, “**In-situ verification of accuracy, precision and resolution of force and balance platforms**”, Biomedical Sciences Instrumentation, 2014, Vol. 50, pp. 171-8.

R.W. Geib, H. Li, G.N. Waite, G. Pagnacco, E. Oggero, B.L. Roberts, “**Using posturography to measure balance control during seated Tai Chi**”, Biomedical Sciences Instrumentation, 2014, Vol. 50, pp. 235-41.

G. Pagnacco, M.W. Bundle, F.R Carrick, C.H.G. Wright, E. Oggero, “**On "Validity and reliability of the Nintendo Wii Balance Board for assessment of standing balance" by R. A. Clark et al. [Gait & Posture 31 (2010) 307-310]: are the conclusions stated by the authors justified?**”, Gait & Posture, 2014, Vol. 39(4), pp. 1150-1, doi:10.1016/j.gaitpost.2013.12.012

G. Pagnacco, M.W. Bundle, F.R Carrick, C.H.G. Wright, E. Oggero, “**Comments to the replies to the Letter to the Editor "Validity and reliability of the Nintendo Wii Balance Board for assessment of standing balance" by R. A. Clark et al. [Gait & Posture 31 (2010) 307-310]: are the conclusions stated by the authors justified?**”, Gait & Posture, 2014, Vol. 39(4), pp. 1158-61, doi:10.1016/j.gaitpost.2013.12.019

2015

G. Pagnacco, F.R Carrick, C.H.G. Wright, E. Oggero, “**Between-subjects differences of within-subject variability in repeated balance measures: consequences on the Minimum Detectable Change**”, Gait & Posture, 2015, Vol. 41, pp. 136-140, doi:10.1016/j.gaitpost.2014.09.016.

F.R. Carrick, G. Pagnacco, C.H.G. Wright, E. Oggero, “**Changes in saccadic eye movements produced by novel brain and vestibular rehabilitation therapy**”, Biomedical Sciences Instrumentation, 2015, Vol. 51, pp. 9-16.

G. Pagnacco, A.S. Klotzek, F.R. Carrick, C.H.G. Wright, E. Oggero, “**Effect of tone-based sound stimulation on balance performance of normal subjects: preliminary investigation**”, Biomedical Sciences Instrumentation, 2015, Vol. 51, pp 56-63.

A. Rahmatullah, M. Panta, R.W. Geib, G.N. Waite, G. Pagnacco, E. Oggero, “**Posturographic performance and repeatability of the computerized sit-to-stand test: preliminary results**”, Biomedical Sciences Instrumentation, 2015, Vol. 51, pp. 64-70.

F.R. Carrick, G. Pagnacco, K. McLellan, R. Solis, J. Shores, A. Fredieu, J. B. Brock, C. Randall, C.H.G. Wright, E. Oggero, “**Short and long term effectiveness of a subject's specific novel brain and vestibular rehabilitation treatment modality in combat veterans suffering from PTSD**”, Frontiers in Public Health, 2015, Vol. 3, No. 151, doi:10.3389/fpubh.2015.00151.

2016

F.R. Carrick, E. Oggero, G. Pagnacco, C.H.G. Wright, C. Machado, G. Estrada, A. Pando, J.C. Cossio and C. Beltrán, “**Eye-Movement Training Results in Changes in qEEG and NIH Stroke Scale in Subjects Suffering from Acute Middle Cerebral Artery Ischemic Stroke: A Randomized Control Trial**”, Frontiers in Neurology, 2016, Vol. 7, No. 3, doi:10.3389/fneur.2016.00003.

S. Gibbs, G. Pagnacco, E. Oggero, “**Validity of the theoretical Limit of Stability in athletes – Preliminary investigation**”, Biomedical Sciences Instrumentation, 2016, Vol. 52, pp. 10-16.

F.R. Carrick, G. Pagnacco, D.A. Barton, E.M. Joubran, M.M. Antonucci, C.H.G. Wright, E. Oggero, “**Accuracy, precision and consistency of robot and therapist generated horizontal head motions for gaze stabilization rehabilitation – Preliminary investigation**”, Biomedical Sciences Instrumentation, 2016, Vol. 52, pp. 300-307.

2017

P. Noone, G. Pagnacco, F.R. Carrick, N. Keiser, C.H.G. Wright, G.N. Waite, E. Oggero, “**Using posturography in a practice-based setting to investigate the effect of saccades in healthy subjects**”, Biomedical Sciences Instrumentation, 2017, Vol. 53, pp. 37-42.

D.C. Paulus, G. Pagnacco, E. Oggero, “**Using posturography to assess the effect of handgun recoil**”, Biomedical Sciences Instrumentation, 2017, Vol. 53, pp. 68-73.

G. Pagnacco, P. Noone, E. Oggero, “**Prospective study of some physical performance measures in young athletes**”, Biomedical Sciences Instrumentation, 2017, Vol. 53, pp. 212-7.

C.C. Keiser, N.D. Keiser, G. Pagnacco, E. Oggero, “**Repeated evaluations of fall risk and posturographic changes during pregnancy and post-partum: a feasibility study**”, Biomedical Sciences Instrumentation, 2017, Vol. 53, pp. 269-75.

D.M. George, G. Pagnacco, K.E. Willey, J.P. Claude, E. Oggero, “**Safety and usability factors in development of a novel, automated treatment device for acute migraine**”, Biomedical Sciences Instrumentation, 2017, Vol. 53, pp. 398-403.

2018

F.R. Carrick, G. Pagnacco, A. Hankir, M. Abdulrahman, R. Zaman, E.R. Kalambaheti, D.A. Barton, P.E. Link and E. Oggero, "**The Treatment of Autism Spectrum Disorder With Auditory Neurofeedback: A Randomized Placebo Controlled Trial Using the Mente Autism Device**", Frontiers in Neurology, 2018, Vol. 9, Art. 537, doi:10.3389/fneur.2018.00537.

2019

Conference papers

F. R. Carrick, K. Mihaly, A. Hankir, M. Abdulrahman, G. Pagnacco, M. M. Antonucci, E. Oggero, "**Feasibility and Reliability of a new test of neurological function in Balance and brain health**", presented at the International Symposium on Clinical Neuroscience, May 24-26, 2019, Orlando FL, USA.

A. Douville, D. George2, G. Buckler, J. Peacock, M. Walker, R. Benz, F. Carrick, G. Pagnacco, E. Oggero, "**Non-Invasive, Automated Variable Pressure Insufflation (AVPI) of the Ear for Acute Migraine Treatment – Clinical Pilot Study**" presented at the 19th Congress of the International Headache Society, 5–8 September 2019, Dublin, Ireland.

M. Wilson, J. Deckert, J. Russell, B. Dai, Q. Zhu, G. Pagnacco, E. Oggero, "**Computerized dynamic posturography for assessment of fatigueand concussion-related balance deficits in dancers**", presented at the 29th Annual Conference of the International Association for Dance Medicine & Science, October 24-27, 2019, Montreal, Quebec, Canada.