Curriculum Vitae

Prof. Bernardo Innocenti, PhD

Personal data:
Name/surname: Bernardo Innocenti
Date of birth: 10/10/1976
Address: Avenue Molière 507 – 1050 Bruxelles (BE)
Nationality: Italian
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Current position:

Professor
Chair of Biomechanics
ULB - Université Libre de Bruxelles
BEAMS Department (Bio Electro and Mechanical Systems)
École polytechnique de Bruxelles
Avenue Fr. Roosevelt 50, CP165/56
1050 Bruxelles, Belgium

Guest Professor
Division of Biomechanics,
Department of Mechanical Engineering,
KU Leuven,
Celestijnenlaan 300C,
3001, Heverlee, Belgium

Education:

Jan. 2003–Jan. 2006
PhD Candidate at the Department of Mechanical and Industrial Technology, University of Florence, Italy.
Promotor: Prof. Andrea Corvi.
PhD-Thesis: Procedure for the evaluation of bone remodelling induced by a hip prosthesis (Procedura per la valutazione del rimodellamento osseo indotto da una protesi d'anca).

Jul. 2002
Master Degree in Mechanical Engineering at the Department of Mechanical and Industrial Technology, (103/110) University of Florence, Italy.
Promotor: Prof. Andrea Corvi.
Copromotors: Prof. Giovanni Zonfrillo

Thesis: Model for the study of myocytes contractility (Modello per lo studio della Contrattilità dei miociti).

Jul. 1995

High school certificate – Technical Secondary School (Electrotechnics Address) (54/60), Technical Industrial Institute, Florence, Italy.

Member:

2010–Present: Member of ESB, European Society of Biomechanics (www.esbiomech.org).
2005–2008: Member of GNB, Italian National Group of Bioengineering (www.bioing.it).
2003–Present: Florence Engineering Professional Association (Ordine degli Ingegneri della Provincia di Firenze) n. 5032

Teaching Experience:

2013 – Present: Professor of the course "Orthopaedic Biomechanics" and "Design of Orthopaedic Devices" at BEAMS Department, Université Libre de Bruxelles.
2012 – Present: Professor of the course "Computer Assisted Surgery" at BEAMS Department, Université Libre de Bruxelles.
2011 – Present: Guest Professor, Division of Biomechanics, Department of Mechanical Engineering, KU Leuven, Belgium
2010 – Present: teach invited lesson of the course "Medical Device Design and Regulatory Affairs" at Division of Biomechanics, Department of Mechanical Engineering, K.U.Leuven, Belgium
2009 – Present: teach invited lesson of the course "Musculoskeletal Biomechanics" at Division of Biomechanics, Department of Mechanical Engineering, K.U.Leuven, Belgium
2002 – 2007: teaching assistant of the following courses: Biomechanics, Biomechanical Devices, Biomaterials, Medical Devices (Biomeccanica, Costruzioni Biomeccaniche, Biomateriali, Dispositivi Medici)
2005 – 2006: One year-Contract Contract Professor for the course Biomaterials (Biomateriali), Faculty of Architecture, University of Florence, Italy
2005 – 2006: One year-Contract Contract Professor for the course Prosthesis and orthoses (Protesi e ortesi), Faculty of Medicine and Surgery, University of Florence, Italy
2004 – 2005: One year-Contract Contract Professor for the course Prosthesis and orthoses (Protesi e ortesi), Faculty of Medicine and Surgery, University of Florence, Italy
2003 – 2004: One year-Contract Contract Professor for the course Prosthesis and orthoses (Protesi e ortesi), Faculty of Medicine and Surgery, University of Florence, Italy
Autumn 2001 – Spring 2002: Contract Professor for the following courses: Mechanical technology – Fluid machinery – Applied mechanics (Tecnologia meccanica – Macchine a fluido – Meccanica applicata alle macchine), 4th and 5th year of Technical Secondary School - Mechanical address (Tecnico delle Industrie Meccaniche), Centro Studi Mugello, Florence, Italy.

Work Experience:

2012 – Present: Professor of Biomechanics, Université Libre de Bruxelles, BEAMS department, Bruxelles, Belgium
2011 – Present: Guest Professor, Division of Biomechanics, Department of Mechanical Engineering, KU Leuven, Heverlee, Belgium
2007 – 2012: Lead Project Manager in Numerical Kinematics, European Centre for Knee Research, Smith & Nephew – Leuven, Belgium

2002 – 2007: Collaboration with several Orthopaedic related Company (Techma S.R.L., Intech S.R.L., Tecnobiomedica S.R.L.), for prosthesis design, stress-strain analysis and finite element on orthopaedic devices.

Computer Skills:
Software: 3-Matic, Abaqus, Adams, Ansys, AutoCAD, KneeSIM, Image–Pro, Isight, LabView, LifeMOD, Matlab, Minitab, Mimics, MTS Software, MS-Office, Python, SolidWorks, Unigraphics, Vicon Nexus.
Operating Systems: MS-DOS, Windows XP/2000/9x.
Hardware: Thermographic analysis, thermocouple analysis, strain gage analysis, accelerometer analysis, Gait Lab, TekScan, FootScan, Wear simulator (ProSimm), Oxford Rig – Knee Kinematic Simulator, Loading Frame.

Research field:
· Knee kinematics/kinetics numerical analysis;
· Knee kinematics/kinetics experimental analysis;
· Knee prosthesis design;
· Hip prosthesis design;
· Bone remodelling models;
· Wear numerical modeling;
· Numerical modeling of biological systems;
· Thermographic analysis on biological systems;
· Finite elements analysis on biological systems;
· Finite elements analysis on orthopaedic devices;
· Kinematics analysis on orthopaedic devices;
· Imaging analysis (RX – CT – MRI);
· Biomaterials;
· Myocytes model;
· Myocytes contractility analysis;
· Statistic;
· Performance analysis on sporty athletes;

Publications:

Personal:

Total Impact Factor:	108.195
Average Impact Factor:	2.64
H-Index:	10

Journal Publications, Book Chapters:

J1. A. Sodi, L. Gloter, B. Innocenti, U. Menchini, A. Corvi, 2005. **Température oculaire dans les occlusions veineuses rétiniennes,** Journal Français d'Ophtalmologie, 28 (1) 151. [IF= 0.482]
J2. A. Corvi, B. Innocenti, M. Marcucci, P.Poli 2005. **Analysis of the hygroscopic effect of bone cements.** J Bone Joint Surg (Br) 87-B, 61. [IF= 3.199]

J3. B. Innocenti, D. Facchielli, S. Torti, A. Verza, 2006. **Analysis of biomechanical quantities during a squat jump evaluation of a performance index.** Journal of Strength and Conditioning Research 20(3), 709-715**.** [IF= 2.561]

J4. A. Corvi, B. Innocenti, R. Mencucci, 2006. **Thermography used for the analysis and comparison of different cataract surgery procedures based on phacoemulsification**. Physiological Measurement 27, 371-384. [IF= 1.43]

J5. A. Corvi, B. Innocenti, 2006. **Numerical analysis of remodeling on a prosthetized femur.** Journal of Applied Biomaterials & Biomechanics 4 (3), 187. [IF= 0.944]

J6. A. Sodi, B. Giambene, G. Falaschi, R. Caputo B. Innocenti, A. Corvi, U. Menchini, 2007. **Ocular surface temperature in central retinal vein occlusion: Preliminary data** Eur J Ophthalmol. 17(5):755-759. [IF= 0.918]

J7. B. Innocenti, A. Corvi, R. Mencucci, 2007. **Thermographic analysis of phacoemulsification based cataract surgery procedures** QIRT Journal 4, 129-140.

J8. B. Innocenti, A. Corvi 2007. **Numerical model of a myocite for the evaluation of the influence of inotropic substances on the myocardial contractility**. In T. Jarm, P. Kramar and A. Zupanic, IFMBE Proceedings - 11th Mediterranean Conference on Medical and Biomedical Engineering and Computing 2007 MEDICON 2007, 26-30 June 2007, Ljubljana, Slovenia. Springer Berlin Heidelberg, 296-299.

J9. B. Innocenti, S. Diciotti, L. Bocchi, R. Mencucci, A. Corvi, 2008. **A comparison between internal and surface temperature measurement techniques during phacoemulsification cataract surgery: thermocamera versus thermocouple.** Journal of Applied Biomaterials and Biomechanics 6, 151-156. [IF= 0.944]

J10. T. Luyckx, K. Didden, H. Vandenneucker, L. Labey, B. Innocenti, J. Bellemans, 2009. **Is there a biomechanical explanation for anterior knee pain in patients with patella alta? Influence of patellar height on patellofemoral contact force, contact area and contact pressure.** J Bone Joint Surg (Br) 91:344-350. [IF= 3.199]

J11. B. Innocenti, L. Labey, J. Victor, P. Wong, J Bellemans, 2009. **An in-vitro study of the human knee kinematics: natural vs. replaced joint.** In J. Vander Sloten, P. Verdonk, M. Nyssen, J. Haueisen, IFMBE Proceedings - 4th European Conference of the International Federation for Medical and Biological Engineering ECIFMBE 2008, 23–27 November 2008 Antwerp, Belgium. Springer Berlin Heidelberg, 22(12): 1789-1793.

J12. B. Innocenti, M. Follador, M. Salerno, C. Bignardi, P. Wong, L. Labey, 2009. **Experimental and numerical analysis of patello-femoral contact mechanics in TKA.** In J. Vander Sloten, P. Verdonk, M. Nyssen, J. Haueisen, IFMBE Proceedings - 4th European Conference of the International Federation for Medical and Biological Engineering ECIFMBE 2008, 23–27 November 2008 Antwerp, Belgium. Springer Berlin Heidelberg, 22(12): 1867-1870.

J13. M. Vaninbroukx, L. Labey, Luc, B. Innocenti, J. Bellemans, 2009. **"Cementing the Femoral Component in Total Knee Arthroplasty: Which Technique is the Best?"** The Knee, 16: 265-268. [IF= 1.464]

J14. B. Innocenti. L. Labey, P. Wong, J. Bellemans 2009. **A numerical analysis of load sharing and prosthesis positioning on the stress distribution in a prosthetized tibial bone.** CMBBE Journal, in press. [IF= 1.454]

J15. J. Victor, D. Van Doninck, L. Labey, B. Innocenti, P.M. Parizel, J. Bellemans, 2009. **How precise can bony landmarks be determined on a CT scan of the knee?** The Knee, 16(5): 358-365. [IF= 1.464]

J16. B. Innocenti, E. Truyens, L. Labey, P. Wong, J. Victor, J. Bellemans, 2009. **Can medio-lateral baseplate position and load sharing induce asymptomatic local bone resorption on the proximal tibia? A finite element study.** Journal of Orthopaedic Surgery and Research, 17;4:26.

J17. F. Catani, B. Innocenti, C. Belvedere, L, Labey, A, Ensini, A. Leardini, 2010. **Articular Contact Estimation in TKA Using In Vivo Kinematics and Finite Element Analysis.** CORR, 468:1-19. [IF= 2.662]

J18. J. Vanlommel, J-Ph. Luyckx, L. Labey, B. Innocenti, R. DeCorte, J. Bellemans, 2011. **Cementing the tibial component in total knee arthroplasty: which technique is the best?** Journal of Arthroplasty, 26,3,492-196. [IF= 2.112]

J19. J. Victor, L. Labey, P. Wong, B. Innocenti, J. Bellemans, 2010. **The Influence of muscle load on tibio-femoral knee kinematics.** Journal Orthopaedic Research, 28(4):419-428. [IF= 3.385]

J20. H.P. Van Jonbergen, K. Koster, L. Labey, B. Innocenti, A. vanKampen, 2010. **Distal femoral bone mineral density decreases following patellofemoral arthroplasty: 1-year follow-up study of 14 patients**, BMC Musculoskeletal Disorders 11:74 (1-20). [IF= 2.248]

J21. P.D. Wong, B. Callewaert, K. Desloovere, L. Labey, B. Innocenti, 2010. **Determination of In Vivo Three-Dimensional Lower Limb Kinematics for Simulation of High-Flexion Squats.** In P.D. Bamidis and N. Pallikarakis, IFMBE Proceedings - 12th Mediterranean Conference on Medical and Biomedical Engineering and Computing 2010 MEDICON 2010, 27-30 May 2010, Chalkidiki, Greece. Springer Berlin Heidelberg, 483-486.

J22. K. Didden, T. Luyckx, J. Bellemans, L. Labey, B. Innocenti, H. Vandenneucker, 2010. **The effect of anteroposterior tibial component positioning on patellofemoral contact mechanics in TKA**. J Bone Joint Surg (Br) 92:1466-70. [IF= 3.199]

J23. L. Labey, B. Innocenti, P.D. Wong, P. M. Parizel, J. Victor, J. Bellemans, 2011. **Sensitivity of knee kinematics and soft tissues to quadriceps load near extension**, J Orthopaedics Translational Research & Clinical Application, 3, 27-37.

J24. Bernardo Innocenti, Silvia Pianigiani, Luc Labey, Jan Victor, Johan Bellemans, 2011. **Contact forces in several TKA designs during squatting: a numerical sensitivity analysis**. J Biomech, 44, 1573-1581. [IF= 3.444]

J25. Bernardo Innocenti, Peter Bollars, Jean-Philippe Luyckx, Luc Labey, Jan Victor and Johan Bellemans, 2011. **In-vitro femoral component loosening of TKA: comparison of high-flex and conventional PS designs**. J Bone Joint Surg (Br) 93-B, 181. [IF= 3.199]

J26. J. Vanbiervliet, J. Bellemans, C. Verlinden, J.P. Luyckx, L. Labey, B. Innocenti, H. Vandenneucker, 2011. **The influence of malrotation and femoral component material on patellofemoral wear during gait**. J Bone Joint Surg (Br) 93-B:1348-1354. [IF= 3.199]

J27. Peter Bollars, Jean-Philippe Luyckx, Bernardo Innocenti, Luc Labey, Jan Victor, Johan Bellemans, 2011. **Femoral component loosening in high-flexion total knee arthroplasty: an in vitro comparison of high-flexion versus conventional designs**. J Bone Joint Surg (Br) 93-B:1355-1361. [IF= 3.199]

J28. Hans-Peter W. Van Jonbergen, Bernardo Innocenti, Luc Labey, Albert Van Kampen, 2011. **Radiological and Finite Element Analysis of Periprosthetic Bone Loss in Patellofemoral Arthroplasty.** Arthroscopy: The Journal of Arthroscopic & Related Surgery, 27:10, e138. [IF= 3.317]

J29. Carsten Tibescku, Bernardo Innocenti, Abraham Salehi, Luc Labey, 2011. **Can CT-based patient-matched instrumentation achieve consistent rotational alignment in knee Arthroplasty?** Archives of Orthopaedic and Trauma Surgery 132:171-177. [IF = 1.196]

J30. M Giorgi, B Innocenti, L Labey, A Audenino, C Bignardi, 2011. **Identification of landmarks on lower limb joint from CT images for kinematics studies: a totally semi-automatic procedure**. Environmental Health & Biomedicine 15:417-427.

J31. Gerd Seitlinger, Georg Scheurecker, Richard Hogler, Luc Labey, Bernardo Innocenti and Sigfrid Hofmann, 2012. **Tibia tubercle – posterior cruciate ligament (TT–PC) distance: A measurement to define the position of the tibia tubercle in patients with patella dislocation.** AJSM 40, 1119-1125 [IF = 3.821]

J32. Carsten Tibesku, David Mehl, Pius Wong, Bernardo Innocenti, Luc Labey, Abraham Salehi, 2012. **Accuracy of Femoral Component Alignment Using Specimen Matched Cutting Blocks: An in Vitro Study.** Journal of Bone & Joint Surgery, British Volume 94 (SUPP XXV), 202-202 [IF= 3.199]

J 33. Hans Peter W van Jonbergen, Bernardo Innocenti, Gian Luca Gervasi, Luc Labey, Nico Verdonschot, 2012. **Differences in the stress distribution in the distal femur between patellofemoral joint replacement and total knee replacement: a finite element study**. Journal of Orthopaedic Surgery and Research 7 (1), 28

J 34. Silvia Pianigiani, Yan Chevalier, Luc Labey, Valerio Pascale, Bernardo Innocenti, 2012. **Tibio-femoral kinematics in different total knee arthroplasty designs during a loaded squat: A numerical sensitivity study.** Journal of Biomechanics 45, 2315-2323 [IF= 3.444].

J 35. Kristof Smeets, Pieter Jacobs, Robbin Hertogs, Jean-Philippe Luyckx, Bernardo Innocenti, Kristoff Corten, Jan Ekstrand, Johan Bellemans, 2012.**Torsional injuries of the lower limb: an analysis of the frictional torque between different types of football turf and the shoe outsole.** Br J Sport Med 46:15, 1078-1083. [IF= 4.144].

J 36. Silvia Pianigiani, Yan Chevalier, Luc Labey, Walter Pascale, Amir Kamali, Bernardo Innocenti, 2012. **Development and validation of a finite element model to predict patello-femoral wear in TKA.** J Biomech 45, S357 [IF= 3.444].

J 37. Silvia Pianigiani, Luc Labey, Walter Pascale, Bernardo Innocenti, 2012. **Changes in TKA kinematics and contact forces induced by mal-configurations: a numerical study.** J Biomech 45, S321 [IF= 3.444].

J 38. Luc Labey, Johan Bellemans, Yan Chevalier, Bilal El-Zayat, Susanne Fuchs-Winkelmann, Petra Heesterbeek, Thomas Heyse, Jacek Kowalczewski, Tomasz Okon, Silvia Pianigiani, Carsten Tibesku, Hilde Vandenneucker, Jan Victor, Ate Wymenga, Bernardo Innocenti, 2012. **In vitro kinematics of human native knees: a database of 60 specimens.** J Biomech 45, S394 [IF= 3.444].

J 39. Thomas Heyse, Bilal F El-Zayat, Yan Chevalier, Bernardo Innocenti, Susanne Fuchs-Winkelmann, Luc Labey, 2012. **In vitro kinematics of unicondylar knee arthroplasty.** J Biomech 45, S389 [IF= 3.444].

J 40. Bernardo Innocenti, Hans-Peter van Jonbergen, Luc Labey, Nico Verdonschot, 2012. **Influence of Design on Potential Periprosthetic Stress Shielding: A Finite Element Analysis.** J Bone Joint Surg (Br) 94, 74 [IF= 3.199].

J 41. Luc Labey, Yan Chevalier, Shingo Fukagawa, Bernardo Innocenti, Tomasz Okon, Johan Bellemans, Jacek Kowalczewski, 2012**. Influence of Joint Line Elevation on Kinematics and Collateral Ligament Strains in Revision Total Knee Arthroplasty.** J Bone Joint Surg (Br) 94, 100 [IF= 3.199].

J 42. Petra Heesterbeek, Luc Labey, Pius Wong, Bernardo Innocenti, Ate Wyemnga, 2012. **Kinematics of an Anatomically Designed Cruciate-Retaining Total Knee Arthroplasty Implanted Using a Spacer-Guided PCL Balancing Technique.** J Bone Joint Surg (Br) 94, 100 [IF= 3.199].

J 43. Silvia Pianigiani, Nicholas Dunbar, Bernardo Innocenti, Luc Labey, Scott Banks, 2012. **Fingerprinting Total Knee Arthroplasty to Characterize Surgical Variability: A Numerical Study.** J Bone Joint Surg (Br) 94, 100 [IF= 3.199].

J 44. Marc Soenen, Matteo Baracchi, Ronny De Corte, Luc Labey, Bernardo Innocenti, 2013. **Stemmed TKA in a Femur With a Total Hip Arthroplasty: Is There a Safe Distance Between The Stem Tips?** J Arthrop, 28, 1437-1445. [IF= 2.384].

J 45. Petra Heesterbeek, Luc Labey, Pius Wong, Bernardo Innocenti, Ate Wyemnga, 2013. **A new spacer-guided, PCL balancing technique for cruciate-retaining total knee replacement**. KSSTA Journal, in press [IF=2.676]

J46. Hendrik Delport, Luc Labey, Ronny De Corte, Bernardo Innocenti, Jos Vander Sloten, Johan Bellemans, 2013. **Collateral ligament strains during knee joint laxity evaluation before and after TKA.** Clinical Biomechanics, 28, 777-782 [IF=2.514].

J 47. Pierluigi Antinolfi, Bernardo Innocenti, Auro Caraffa, Giuseppe Peretti, Giuliano Cerulli, 2013. **Post-operative blood loss in total knee arthroplasty: knee flexion versus pharmacological techniques.** KSSTA Journal, in press [IF=2.676].

J 48. Pierluigi Antinolfi, GianLuca Gervasi, Silvia Pianigiani, Andrea Speziali, Matteo Tei, Giacomo Placella, Walter Pascale, Bernardo Innocenti, Giuliano Cerulli, 2013. **Does Medial Patello-Femoral Ligament Reconstruction alter Patella Femoral Mechanics? A Pilot Study.** Journal of Orthopedics Trans Res&Clin Appl 5, 105-112.

J 49. Silvia Pianigiani, Pierluigi Antinolfi, Stéphane Godet, Loïc Malet, Luc Labey, Walter Pascale, Bernardo Innocenti, 2013. **Mechanical Characterization of Collateral Ligaments of a Human Knee**. Journal of Orthopedics Trans Res&Clin Appl (in press).

J 50. Jean Brilhault, Alessandre Navacchia, Silvia Pianigiani, Luc Labey, Ronny De Corte, Bernardo Innocenti 2013. **Performances mécaniques de l'implant tibial des PTG: polyéthylène monobloc VS métal-back.** Revue de Chirurgie Orthopédique et Traumatologique, 99, 378-379.

J 51. Thomas J Heyse, Bilal F El-Zayat, Ronny De Corte, Yan Chevalier, Lennart Scheys, Bernardo Innocenti, Susanne Fuchs-Winkelmann, Luc Labey, 2013. **UKA closely preserves natural knee kinematics in vitro.** KSSTA Journal, in press [IF=2.676].

J 52. Bernardo Innocenti, Ömer F Bilgen, Luc Labey, Harry G van Lenthe, Jos Vander Sloten, Fabio Catani, 2014. **Load sharing and ligament strains in balanced, overstuffed and understuffed UKA. A validated finite element analysis.** Journal of Arthroplasty (in press) [IF= 2.384].

J 53. Hendrik Delport, Luc Labey, Bernardo Innocento, Ronny De Corte, Jos Vander Sloten, Johan Bellemans, 2014. **Restoration of constitutional alignment in TKA leads to more physiological strains in the collateral ligaments.** KSSTA Journal, in press [IF=2.676].

Conference Papers (a mark * indicates invited lectures):

C1. R. Mencucci, A. Corvi, A. Sodi, B. Innocenti, U. Menchini. In vivo measurement of temperature during phacoemulsification: Bimanual Vs Standard procedure. Microincisione e tecniche a confronto, Lido di Camaiore, April 2003.

C2. R. Mencucci, A. Sodi, A. Corvi, B. Innocenti, U. Menchini. In vivo measurement of phaco tip temperature during phacoemulsification surgery in human eyes. SCRS ASOA 2003 Symposium and congress, San Francisco 12-16 April 2003.

C3. A. Corvi, B. Innocenti, M. Marcucci, P. Poli, T. Severi. Alcune soluzioni per la realizzazione di placche per osteosintesi con sistema di serraggio misto. XV Congresso SIBOT, Rome 2003.

C4. A. Corvi, B. Innocenti, M. Marcucci, P. Poli, T. Severi. Analisi delle pressioni all'interfaccia cemento-stelo protesico. Congresso Nazionale Biomateriali 2003: Biomateriali: ricerca e industria, Ischia September 2003.
C5. A. Corvi, B. Innocenti, M. Marcucci, P. Poli. Analysis of the hygroscopic effect of bone cements. Atti del VI Congresso Nazionale IORS, Bologna, 22-23 april 2004.
C6. A. Corvi, B. Innocenti. Development of a procedure for the in-vivo evaluation of the wear in hip prostheses acetabular cups. UHMWPE for arthroplasty: degradation stabilization and cross-linking, Torino, 18 march 2005.
C7. A. Sodi, L. Gloter, B. Innocenti, U. Menchini, A. Corvi. Surface eye temperature in retinal vein occlusions. Congres Societè Française d'Ophtalmologie (SOF), Paris, 7-11 may 2005.
C8. A. Corvi, B. Innocenti. Analisi numerica del rimodellamento di un femore protesizzato. XVI Congresso SIBOT, Paestum, 2005.
C9. A. Corvi, M. Ceruso, P. Bigazzi, B. Innocenti. Stima del rimodellamento osseo del perone dopo autotrapianto vascolarizzato nella ricostruzione diafisaria dell'omero. XVI Congresso SIBOT, Paestum, 2005.
C10. P.M. Calderale, A. Audenino, A. Corvi, C. Bignardi, B. Innocenti, E. Zanetti. Contributo biomeccanico alla pianificazione pre-operatoria dell'artoplastica d'anca. XVI Congresso SIBOT, Paestum, 2005.
C11. L. Bocchi, A. Corvi, B. Innocenti. Procedura automatica per la stima del rimodellamento osseo in femori protesizzati mediante analisi di RX. BIOMAT '05, Messina, 2005.
C12. G. Arcidiacono, A. Corvi, B. Innocenti, A. Sodi. Caratterizzazione di un occhio fisiologico mediante analisi termografica. BIOMAT '05, Messina, 2005.
C13. B. Innocenti, A. Corvi. Numerical analysis of remodelling on a prosthetized femur. EMBEC 2005, Prague, 2005.
C14. L. Bocchi, P. De Giacomo, B. Innocenti, S. Lombardo, F. Toccafondi, F. Veronesi. Detection and characterization of lesions in breast MR imaging. EMBEC 2005, Prague, 2005.
C15. A. Corvi, B. Innocenti, R. Mencucci. Thermographic analysis of phacoemulsification based cataract surgery procedures. QIRT 2006 , Padova, June 28-30, 2006
C16. B. Innocenti, A. Corvi. Numerical model of a myocyte for the evaluation of the influence of inotropic substances on the myocardial contractility. 11th Mediterranean Conference on Medical and Biomedical Engineering and Computing 2007 MEDICON 2007, 26-30 June 2007.
C17. B. Innocenti, L. Labey, P. Wong, J. Bellemans, J. Victor. Numerical and experimental kinematics and contact analysis in a Bi-Cruciate TKA during gait. – 21st European Conference on Biomaterials – 9-13th September 2007 Brighton UK
C18. L. Labey, B. Innocenti, P. Wong, J. Bellemans, J. Victor. Experimental and numerical analyses of the contact pressure and kinematics at the tibial/femoral interface in a Bi-Cruciate stabilized TKA during gait.– ISTA 2007, 20th annual congress – 4-6 October 2007 Paris F
C19. B. Innocenti, L. Labey, P. Wong, J. Bellemans. A numerical analysis of the effects of load sharing and prosthesis positioning on the stress distribution in a prosthetized tibial bone. Computer Methods in Biomechanics and Biomedical Engineering CMBBE 2008 – 27 Feb – 1 Mar, Porto, Portugal
C20. B. Innocenti, L. Labey, J. Bellemans. Analysis of the effect of prosthesis positioning and load sharing on the stress distribution of a prosthetized tibial bone: a numerical study. World of Biomaterial Congress 2008, Amsterdam, Holland.
C21.* B. Innocenti. The use of Mimics to define landmarks for the kinematics analysis of the knee. Medical innovation conference. 30-31 May 2008, Vienna.

C22.* B. Innocenti. Prosthetized knee kinematics: Biomechanics – Design – Research. Invited lecture at XXI Congresso Nazionale SPIGC (Società Polispecialistica Italiana dei Giovani Chirurghi) 15-18 Giugno 2008.

C23. M. Salerno, M. Follador, C. Bignardi, B. Innocenti, L. Labey, P. Wong. Experimental and numerical analysis of the patello-femoral contact mechanics in a human knee. EMBEC 2008 Antwerp.

C24. B. Innocenti, L. Labey, P. Wong, D. Van Donink, J. Victor. Identification of anatomical landmarks from CT for the description of the in vitro kinematics of the human knee. EMBEC 2008 Antwerp.

C25.* B. Innocenti. In vivo kinematics and FEA simulation of guided motion Total knee arthroplasty. Abaqus – Benelux Users' Meeting, 13-14 November 2008 Antwerp, Belgium

C26. F. Catani, B. Innocenti, C. Belvedere, L. Labey, A. Ensini, A. Leardini. In Vivo Kinematics And FEA Simulation Of Guided Motion Total Knee Arthroplasty. Specialty Days AAOS 2009 LasVegas NV.

C27. B. Innocenti, C. Belvedere, F. Catani, L. Labey, A. Ensini, A. Leardini. Finite Element evaluation of the articular contact in a TKA during in-vivo dynamic weight bearing activities. IMechE Congress: Knee Arthroplasty 2009: from early intervention to revision – 30 April-2May 2009, London, England.

C30. B. Innocenti, C. Belvedere, F. Catani, L. Labey, A. Ensini, A. Leardini. In vivo articular contact analysis in a TKA – a finite element study. ICCB 2009 – Bertinoro, Italy.

C31.* B. Innocenti. "Realistic Simulation-Driven Design for the Orthopedics Industry", Simulia Webinar, October 22nd 2009.

C32. P. Wong, C. Benti, B. Innocenti, A. Corvi, J. Victor, B. Callewaert, K. Desloovere, C. Tibescu. Validation of passive kinematics of a prototype physical knee model with simulated soft tissues. ORS 2010 New Orleans, LA.

C33. B. Innocenti, S. Pianigiani, L. Labey, A. Corvi, J. Victor, J. Bellemans. Numerical sensitivity analysis of contact forces in several TKAs during squatting. ORS 2010 New Orleans, LA.

C34. K. Smeets, P. Jacobs, R. Hertogs, J-Ph. Luyckx, B. Innocenti, J. Bellemans. Torsion injuries in the knee: analysis of the frictional torque between grass field and soccer shoe. EFORT 2010 Madrid, Spain.

C35. N. Arnout, J. Vanlommel, L. Vanlommel, JP. Luyckx, B. Innocenti, L. Labey, J. Victor, J. Bellemans. Post-cam contact mechanics in posterior stabilized TKA designs. EFORT 2010 Madrid, Spain.

C36. P.N.J. Bollars, J.-Ph. Luyckx, B. Innocenti, L. Labey, R. DeCorte, J. Victor and J. Bellemans. In-vitro femoral component loosening of high-flexion TKA: comparison of different designs. EFORT 2010 Madrid, Spain.

C37. C. O. Tibesku, P. Wong, B. Innocenti, R. DeCorte, L. Labey. Knee kinematics: native versus bi-compartmental, PCL retaining and posterior stabilized implants. EFORT 2010 Madrid, Spain.

C38. B. Innocenti, F. Catani, C. Belvedere, L. Labey, A. Ensini, A. Leardini, V. Di Gennaro, M. Salerno, C. Bignardi, S. Giannini. A validated technique for the evaluation of post-cam and condylar contacts in a TKA. EFORT 2010 Madrid, Spain.

C39. C. Tibesku, P. Wong, B. Innocenti, L. Labey. An in vitro study of knee kinematics: native versus bi-compartmental, PCL retaining and posterior stabilized implants. ESSKA 2010 Oslo, Norway.

C40. J. VanLommel, J-Ph. Luyckx, L. Labey, B. Innocenti, R. DeCorte, J. Bellemans. Cementing the tibial component in total knee arthroplasty: which technique is the best? ESSKA 2010 Oslo, Norway.

C41. P. Bollards, J-Ph. Luyckx, B. Innocenti, L. Labey, J. Victor, J. Bellemans. In-vitro testing of loosening of the femoral component in comparison of several high-flex and conventional PS designs. ESSKA 2010 Oslo, Norway.

C42. K. Smeets, P. Jacobs, R. Hertogs, J-Ph. Luyckx, B. Innocenti, K. Corten, J. Bellemans. Torsion injuries in the knee: analysis of the frictional torque between grass field and soccer shoe. ESSKA 2010 Oslo, Norway.

C43. P. Antinolfi, B. Innocenti, A. Caraffa, G. Cerulli. Blood loss in total knee replacement: pharmacological vs mechanical hemostasis. ESSKA 2010 Oslo, Norway.
C44. PD. Wong, B. Callewaert, K. Desloovere, L. Labey, B. Innocenti. Determination of In Vivo Three-Dimensional Lower Limb Kinematics for Simulation of High-Flexion Squats 12th Mediterranean Conference on Medical and Biomedical Engineering and Computing 2010 MEDICON 2010, 27-30 May 2010, Chalkidiki, Greece.
C45. K. Manal, B. Innocenti, L. Labey, T. Buchanan. Condylar contact during normal walking and lateral trunk sway gait: an EMG-driven modelling approach to estimate articular loading. ASME Summer Bioengineering Conference, June 16-19 Naples, Florida, US.
C46. B. Innocenti, S. Pianigiani, A. Corvi, L. Labey. Contact forces in several TKA designs during a squat movement: a numerical sensitivity analysis. 17th Congress of the European Society of Biomechanics, University of Edinburgh, UK, 5 - 8 July 2010.
C47. C. Benti, P. Wong, A. Corvi, B. Innocenti. Validation of passive kinematics of a physical knee model with simulated soft tissues. 17th Congress of the European Society of Biomechanics, University of Edinburgh, UK, 5 - 8 July 2010.
C48. B. Innocenti, K. Manal, L. Labey, T. Buchanan. Condylar contact during normal walking and lateral trunk sway gait: an EMG-driven modelling approach to estimate articular loading. 2010 IUTAM Symposium, International Union of Theoretical and applied Mechanics, 13-15 September, Leuven, Belgium.
C49. C. Tibesku, D. Mehl, P. Wong, B. Innocenti, L. Labey, A. Salehi. Accuracy of Femoral Component Alignment Using Specimen Matched Cutting Blocks: An in Vitro Study. ISTA – International Society for Technology in Arthroplasty 2010. Oct. 6-9 Dubai, United Arab Emirates.
C50. A.B. Wymenga, P.J.C. Heesterbeek, L. Labey, B. Innocenti, P. Wong. Kinematics of an anatomically-designed cruciate retaining total knee arthroplasty implanted with a spacer guided PCL balancing. 14èmes Journées Lyonnaises de Chirurgie du Genou, 4th European Advanced Course on Knee Arthroplasty. 7-9 October 2010, Lyon, France.
C51. P. Antinolfi, B. Innocenti, A. Caraffa, G. Cerulli. Blood loss in total knee arthroplasty: Mechanical vs pharamcological approach. SPIG National Congress. June 20-23, 2010, Forli, Italy.
C52. P. Antinolfi, B. Innocenti, A. Caraffa, G. Cerulli. Blood loss in total knee arthroplasty: Mechanical vs pharamcological approach. SIGASCOT National Meeting, 14-16 October 2010, Verone, Italy.
C53.* B. Innocenti. Finite element analysis: a perfect tool for biomechanical engineering. The ECKR experience. Abaqus – Benelux Users' Meeting, 15-16 November 2010 Oud-Turnhout, Belgium
C54. N. Dunbar, B. Innocenti, S. Pianigiani, L. Labey, S. Banks. Effect of Component Malrotations in Several TKA Designs during Squatting: A Numerical Study. ORS 2011 Long Beach, CA.
C55. L. Labey, P. Heesterbeek, P. Wong, B. Innocenti, A. Wymenga. Kinematics of an anatomically designed cruciate retaining total knee arthroplasty implanted using a spacer guided PCL balancing technique. ORS 2011 Long Beach, CA.
C56.* B. Innocenti. Finite Element Analysis: a perfect tool for biomechanical engineering – the ECKR experience. Symposium Bridging the gap: knee kinematics from lab to clinical practice Sint Maartenskliniek, Nijmegen. 25 January 2011
C57. P. Antinolfi, B. Innocenti, L. Labey, A. Caraffa, G. Cerulli. Blood loss in total knee arthroplasty: tranexamic acid Vs mechanical flexion technique. AAOS 2011, 15-19 February, San Diego, CA.
C58.* B. Innocenti, H.P.W. van Jonbergen, L. Labey, N. Verdonschot. Periprosthetic stress shielding in patello-femoral arthroplasty: experimental and numerical analysis. 2011 SIMULIA Customer Conference 17-19 May, Barcelona, Spain.

C59. H.P.W. van Jonbergen, B. Innocenti, L. Labey, A Van Kampen. Radiological and Finite Element Analysis of Periprosthetic Bone Loss in Patellofemoral Arthroplasty. 8th Biennial ISAKOS Congress 2011. 15-19 May, Rio de Janeiro, Brazil.
C60. P. Bollars, J.P. Luyckx, B. Innocenti, L. Labey, J. Victor, J. Bellemans. In-Vitro Femoral Component Loosening of High-Flexion TKA: Comparison of Different Designs. 8th Biennial ISAKOS Congress 2011. 15-19 May, Rio de Janeiro, Brazil.
C61. S. Pianigiani, B. Innocenti, L. Labey, J. Victor, J. Bellemans. Numerical simulation to analyze loaded in vitro squat. XIII International Symposium on Computer Simulation in Biomechanics. June 30th - July 2nd 2011, Leuven, Belgium
C62. S. Pianigiani, B. Innocenti, L. Labey, J. Victor, J. Bellemans. Tibiofemoral and patellofemoral forces in TKA designs during loaded squat. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C63. B. Innocenti, G. Gervasi, H.P.W. van Jonbergen, L. Labey, N. Verdonschot. Dynamic finite element analysis of the stress distribution in a distal femur during a loaded squat: comparison between patellofemoral joint replacement and total knee arthroplasty. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C64. M. Baracchi, M. Soenen, Y. Chevalier, B. Innocenti. Is there a safe bony distance between the stems in combined total knee and total hip replacements? A finite element study. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C65. JP. Luyckx, P. Bollards, B. Innocenti, L. Labey, J. Victor, J. Bellemans. In vitro femoral component loosening in posterior stabilized total knee arthroplasty. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C66. L. Labey. P Hesteerbeek, P. Wong, B. Innocenti, A. Wymenga. Kinematics of an anatomically-designed cruciate retaining total knee arthroplasty implanted with a spacer guided PCL balancing. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C67. N. Fanciullacci, M. Lisanti, Y. Chevalier, B. Innocenti, S. Fuchs-Winklemann. Revision total knee replacements: condylar constrained knee versus hinge prosthesis: a finite element study. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C68. L. Labey, B. Innocenti, N. Debuscchere, D. De Wilde, J. Victor, J. Bellemans. The optimal flexion axis in the human knee: its relation to anatomical landmarks and to muscle loads. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C69. JP. Luyckx, L. Labey, N. Arnout, B. Innocenti, J. Victor, J. Bellemans. In vitro analysis of the post-cam mechanics in posterior stabilized total knee arthroplasty designs. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C70. K. Denis, B. Innocenti, JP, Luyckx, K. Smeets, J. Bellemans. Development of a device to test the rotational and translational interaction of the shoe-surface systems. ISB 2011, International Society of Biomechanics July 3-7, Brussels, Belgium.
C71. M. Giorgi, B. Innocenti, L. Labey, A. Audenino, C. Bignardi. Identification of landmarks on lower limb joint from CT images for kinematics studies. A totally semi-automatic procedure. Biomedicine 2011. 27-29 July, Riga, Latvia.
C72. L. Labey, Y. Chevalier, S. Fukagawa, B. Innocenti, T. Okon, J. Bellemans, J. Kowalczewski. Influence of Joint Line Elevation on Kinematics and Collateral Ligament Strains in Revision Total Knee Arthroplasty. ISTA 2011, September 20-23 – Brugge, Belgium.
C73. S. Pianigiani, N. Dunbar, B. Innocenti, L. Labey, S. Banks. Fingerprinting Total Knee Arthroplasty to Characterize Surgical Variability: A Numerical Study. ISTA 2011, September 20-23 – Brugge, Belgium.

C74. P. Heesterbeek, L. Labey, P. Wong, B. Innocenti, A. Wyemnga. Kinematics of an Anatomically Designed Cruciate-Retaining Total Knee Arthroplasty Implanted Using a Spacer-Guided PCL Balancing Technique. ISTA 2011, September 20-23 – Brugge, Belgium.
C75. JP. Luyckx, C. Verlinden, J. Vanbiervliet, L. Labey, B. Innocenti, J. Bellemans, H. Vandenneucker. The Influence of Malrotation and Material of the Femoral Component on Patellofemoral Contact Mechanics and Wear during Gait. ISTA 2011, September 20-23 – Brugge, Belgium.
C76. B. Innocenti, HP. van Jonbergen, L. Labey, N. Verdonschot. Influence of Design on Potential Periprosthetic Stress Shielding: A Finite Element Analysis. ISTA 2011, September 20-23 – Brugge, Belgium.
C77. B. El-Zayat, T. Heyse, N. Fanciullacci, Y. Chevalier, S. Fuchs-Wimkelmann, B. Innocenti. Analysis of Cemented and Cementless, Short and Long Stem in a Hinged Total Knee Arthroplasty (TKA): A Numerical Study. ISTA 2011, September 20-23 – Brugge, Belgium.
C78. JP. Luyckx, M. Vaninbroukx, J. Vanlommel, E. Neven, F. Verheyden, L. Labey, B. Innocenti, J. Bellemans. Which Cementing Technique Provides an Optimal Cement Penetration in Total Knee Arthroplasty? ISTA 2011, September 20-23 – Brugge, Belgium.
C79. T. Heyse, B. El-Zayat, Y. Chevalier, B. Innocenti, S. Fuchs-Winkelmann, L. Labey. In Vitro Knee Kinematics of Unicondylar Knee Arthroplasty. ISTA 2011, September 20-23 – Brugge, Belgium.
C80. S. Pianigiani, L. Scheys, L. Labey, B. Innocenti. Post-Cam Contact Mechanics during Several Activities in Primary and Revision TKA Designs: A Numerical Study. ISTA 2011, September 20-23 – Brugge, Belgium.
C81. S. Zanasi, B. Innocenti. Monobloc Bicompartmental Knee Arthroplasty for Earlier Treatment of Combined Patello-Femoral and Medial Tibio-Femoral Knee Osteoarthritis: Preliminary Results. ISTA 2011, September 20-23 – Brugge, Belgium.
C82. M. Baracchi, M. Soenen, Y. Chevalier, B. Innocenti. Finite Element Study of a Femur with a Total Knee and Total Hip Replacement. Is There a Safe Bony Distance? ISTA 2011, September 20-23 – Brugge, Belgium.
C83.* B. Innocenti, 3D computational simulations of a replaced human knee. The ECKR experience. Medical Engineering Seminar, Materialise and Simulia, October 4th, Leuven, Belgium.
C84.* B. Innocenti. 3D computational simulations of a replaced human knee. The ECKR experience. Abaqus – Benelux Users' Meeting, 17-18 November 2011, Klooster Elsendael, Boxmeer, Netherlands.
C85. T.J. Heyse, B.F. El-Zayat, Y. Chevalier, B. Innocenti, S. Fuchs-Winkelmann, L. Labey. Unicondylar Knee Arthroplasty kinematics in vitro. 23rd Annual Holiday Total Knee Course, 1-2 December 2011, New York, US.
C86.* B. Innocenti. Il punto di vista della ricerca biomeccanica sulle superfici articolari nella TKA. Corso teorico Pratico su cadavere di Chirurgia Protesica di Ginocchio. January 23-24, 2012, Barcelona, Spain.
C87. S. Pianigiani, Y. Chevalier, L. Labey, V. Pascale, W. Pascale, A. Kamali, B. Innocenti. Development and validation of a Finite Element Model to predict patello-femoral wear in a TKA. 20th Annual Symposium on Computational Methods in Orthopaedic Biomechanics, February 3rd, 2012, Berkeley, CA.
C88. B.F. El-Zayat, T.J. Heyse, N. Fanciullacci, Y. Chevalier, S. Fuchs-Winkelmann, B. Innocenti. Numerical Analysis of Stem Length and Fixation Technique in a Hinged Total Knee Arthroplasty. ORS 2012, San Francisco, CA.
C89. Nicholas Dunbar, Silvia Pianigiani, Bernardo Innocenti, Luc Labey, Scott A. Banks. TKA Fingerprinting: Patellar Tendon Wrapping During Joint Line Elevation. ORS 2012, February 4-7, San Francisco, CA.

C90. Silvia Pianigiani, Luc Labey, Walter Pascale, Bernardo Innocenti. Tibiofemoral Kinematics in Several TKA Designs during a Loaded Squat. ORS 2012, February 4-7, San Francisco, CA.
C91. J-Ph. Luyckx, C. Verlinden, J. Vanbiervliet, L. Labey, B. Innocenti, J. Bellemans, H. Vandenneucker. The Influence of Malrotation and Material of the Femoral Component on Patellofemoral Contact Mechanics and Wear during Gait. ORS 2012, February 4-7, San Francisco, CA.
C92. N.Arnout, L. Vanlommel, J. Vanlommel, JP. Luyckx, L. Labey, B. Innocenti, J. Victor, J. Bellemans. Dynamic in vitro analysis of post – cam function and contact mechanics in contemporary PS Total Knee designs during a squat. AAOS 2012, February 7-11, San Francisco, CA.
C93. J-Ph. Luyckx, C. Verlinden, J. Vanbiervliet, L. Labey, B. Innocenti, J. Bellemans, H. Vandenneucker. The Effect of Femoral Implant Malrotation and Material on Patellofemoral Contact Mechanics and Wear during Gait. AAOS 2012, February 7-11, San Francisco, CA.
C94. Silvia Pianigiani, Luc Labey, Walter Pascale, Bernardo Innocenti. Tibio-Femoral Kinematics of Total Knee Arthroplasty during a Loaded Squat: a Numerical Study. 10th International Symposium on Biomechanics and Biomedical Engineering, April 11-14th, 2012, Berlin.
C95. Yan Chevalier, Silvia Pianigiani, Bernardo Innocenti, Walter Pascale, Amir Kamali and Luc Labey. Prediction of Patello-Femoral Wear in Total Knee Arthroplasty with a Validated Numerical Model. 10th International Symposium on Biomechanics and Biomedical Engineering, April 11-14th, 2012, Berlin.
C96.* B. Innocenti. Il punto di vista della ricerca biomeccanica sulle superfici articolari nella TKA. Corso teorico Pratico su cadavere di Chirurgia Protesica di Ginocchio. April 16-17th, 2012, Barcelona, Spain.
C97. Kristof Smeets, Pieter Jacobs, Robbin Hertogs, Jean-Philippe Luyckx, Bernardo Innocenti, Ronny De Corte, Kristoff Corten, Jan Ekstrand, Johan Bellemans, 2012. Torsional injuries of the lower limb: An analysis of the frictional torque between different types of football turf and the shoe outsole. International Conference on Sports Rehabilitation and Traumatology in London, April 21-22nd, Chelsea, London.
C98. S. Pianigiani, L. Scheys, L. Labey, W. Pascale, B. Innocenti. A numerical study to analyze the post-cam force in primary and revision TKAs during several daily activities. 15th ESSKA Congress, May 2nd-5th, 2012, Geneva, Switzerland.
C99. Suzanne Fuchs-Winkelmann, Bilal F. El-Zayat, Thomas J. Heyse, Nelson Fanciullacci, Yan Chevalier and Bernardo Innocenti. Analysis of cemented and cementless, short and long stem in a hinged Total Knee Arthroplasty (TKA): a numerical study. 15th ESSKA Congress, May 2nd-5th, 2012, Geneva, Switzerland.
C100. S. Pianigiani, Y. Chevalier, L. Labey, W. Pascale, B. Innocenti. Effects of component malpositioning and soft-tissue balancing in Total Knee Arthroplasty kinematics. 15th ESSKA Congress, May 2nd-5th, 2012, Geneva, Switzerland.
C101.Hilde Vandenneucker, Luc Labey, Yan Chevalier, Bernardo Innocenti, Jan Victor, Johan Bellemans. In vitro measurement of native patella kinematics in different loading conditions and motor tasks. 15th ESSKA Congress, May 2nd-5th, 2012, Geneva, Switzerland.
C102. Petra Heesterbeek, Luc Labey, Pius Wong, Bernardo Innocenti, Ate Wymenga. A new spacer-guided PCL balancing technique results into good kinematics of an anatomically designed cruciate-retaining total knee arthroplasty. 15th ESSKA Congress, May 2nd-5th, 2012, Geneva, Switzerland.
C103. Silvia Pianigiani, Yan Chevalier, Luc Labey, Walter Pascale, Bernardo Innocenti Bernardo. Malpositioning and Balancing in Total Knee Arthroplasty alters tibiofemoral kinematics. A numerical sensitivity analysis of different implant designs. 13th EFORT Congress, 23-25th May 2012, Berlin.

C104. ***** Bernardo Innocenti. Analisi numerica delle sollecitazioni meccaniche indotte dagli steli protesici nelle protesi con diverso tipo divincolo. Conference "La riprotesizzaziondi di ginocchio, linee guida e sistemi a confronto. June 15th 2012 Firenze.

C105. S. Pianigiani, Y. Chevalier, L. Labey, W. Pascale, A. Kamali, B. Innocenti. Development and Validation of a Finite Element Model to Predict Patello-femoral Wear in TKA. 18th Congress of the European Society of Biomechanics in Lisbon, Portugal, 1-4 July, 2012.

C106. Th. Heyse, B. El-Zayat, Y. Chevalier, B. Innocenti, S. Fuchs-Winkelmann, L. Labey. In Vitro Kinematics of Unicondylar Knee Arthroplasty. 18th Congress of the European Society of Biomechanics in Lisbon, Portugal, 1-4 July, 2012.

C107.L. Labey, J. Bellemans, Y. Chevalier, B. El-Zayat, S. Fuchs-Winkelmann, P. Heesterbeek, Th. Heyse, J. Kowalczewski, T. Okon, S. Pianigiani, C. Tibesku, H. Vandenneucker, J. Victor, A. Wymenga, B. Innocenti. In Vitro Kinematics of Human Native Knees: a Database of 60 Specimens. 18th Congress of the European Society of Biomechanics in Lisbon, Portugal, 1-4 July, 2012.

C108. Silvia Pianigiani, Luc Labey, Walter Pascale, Bernardo Innocenti. Changes in TKA kinematics and contact forces induced by mal-configurations: a numerical study. 18th Congress of the European Society of Biomechanics in Lisbon, Portugal, 1-4 July, 2012.

C109. Hendrik Delport, Luc Labey, Ronny De Corte, Bernardo Innocenti, Jos Van der Sloten, Johan Bellemans. Collateral ligament strain after implantation of a total knee arthroplasty with measured resection technique. EORS 2012, September 26-28, Amsterdam, NL.

C110. Thomas Heyse, Bilal El-Zayat, Yan Chevalier, Bernardo Innocenti, Susanne Fuchs-Winkelmann, Luc Labey. Unicondylar Knee Arthroplasty kinematics in vitro. EORS 2012, September 26-28, Amsterdam, NL.

C111. Susanne Fuchs-Winkelmann, Bilal El-Zayat, Thomas Heyse, Nelson Fanciullacci, Yan Chevalier, Bernardo Innocenti. Analysis of different stem lengths and fixation techniques in hinged total knee arthroplasty. EORS 2012, September 26-28, Amsterdam, NL.

C112. ***** Bernardo Innocenti. Tribology in Joint Arthroplasty. 2012 Orthopaedica Belgica Course: Practical Biomechanics for the Orthopaedic Surgeon. Bruxelles, December 1st 2012.

C113. ***** Bernardo Innocenti. Taking into consideration the biomechanical aspects: anatomy and functional aspects of the body. Masterclass: Biomedical application of Additive Manufacturing. Leuven, March 12th 2013.

C114. Thomas J. Heyse, Bilal El-Zayat, Yan Chevalier, Ronny De Corte, Bernardo Innocenti, Susanne Fuchs-Winkelmann, Luc Labey. Patella Kinematics in Total Knee Arthroplasty with Femoral Malrotation In Vitro. AAOS 2013, March 19-23, Chicago, IL.

C115. Bernardo Innocenti, Marc Soenen, Matteo Baracchi, Luc Labey. TKA Revision in a Femur with a Total Hip Arthroplasty: Is There a Safe Distance between the Stem Tips? AAOS 2013, March 19-23, Chicago, IL.

C116. Georg Scheurecker, Richard Högler, Luc Labey, Bernardo Innocenti, Siegfried Hofmann, Gerd Seitlinger. Pathologic tibia tubercle - Trochlea groove distance (TT-TG) – It is not always the tibia tubercle. 14th EFORT Congress 2013, 5-8June, Istanbul, Turkey.

C117. Silvia Pianigiani, Walter Pascale, Valerio Pascale, Lennart Scheys, Luc Labey, Bernardo Innocenti. Biomechanical analysis of post-cam mechanism: comparison between conventional and semi-constrained designs. XIII SICOP 2013 National Congress, Genova, June 21-22.

C118. Silvia Pianigiani, Friedl De Groote, Lennart Scheys, Pierre Gillen, Luc Labey, Bernardo Innocenti, Ilse Jonkers. Tibio-Femoral contact force during gait: an iterative method using EMG-constrained multibody simulation and finite element analysis. SBC2013, ASME 2013 Summer Bioengineering Conference, June 26-29, Sunriver, Oregon.

C119. Silvia Pianigiani, Stéfan Godet, Loïc Malet, Ronny De Corte, Luc Labey, Bernardo Innocenti. Mechanical characterization of cruciate and collateral ligaments of human knee. ISB 2013, XXIV Congress of the International Society of Biomechanics, August 4-9, Natal, Brazil.
C120. Silvia Pianigiani, Stéfan Godet, Loïc Malet, Ronny De Corte, Luc Labey, Walter Pascale, Bernardo Innocenti. Mechanical characterization of cruciate and collateral ligaments of human knee. ESB 2013, 19th Congress of the European Society of Biomechanics, August, 25-28 Patras, Greece.
C121. * Bernardo Innocenti. Biomechanics of Implant. AOTrauma Course - Principles in Operative Fracture Management: October, 17-19, 2013, Ovifat, Belgium.
C122. Silvia Pianigiani, Pierluigi Antinolfi, Walter Pascale, Giuliano Cerulli, Bernardo Innocenti. Mechanical Characterization of Cruciate and Collateral Ligaments of Human Knee. EWL&T I, European Workshop on Ligament and Tendons, October 19th-20th 2013 Arezzo, Italy.
C123. Pierluigi Antinolfi, GianLuca Gervasi, Andrea Speziali, Matteo Tei, Giacomo Placella, Silvia Pianigiani, Walter Pascale, Bernardo Innocenti, Giuliano Cerulli. Does MPFL Reconstruction alter Patella Femoral Mechanics? A Pilot Study. EWL&T I, European Workshop on Ligament and Tendons, October 19th-20th 2013 Arezzo, Italy.
C124.* B. Innocenti. Close To Real Modeling of the Native Knee Joint and After Implant Replacement. The ECKR experience. Abaqus – Benelux Users' Meeting, 13-14 November 2013, Bovendonk, Netherlands.
C125.* B. Innocenti. Knee Biomechanics: to close the gap between surgeons and engineers. Invited Lecture at IRCCS, Istituto Ortopedico Galeazzi, Milano Italy. January 9th 2014.
C126. Bernardo Innocenti, Ömer Faruk Bilgen, Luc Labey, G. Harry van Lenthe, Jos Vander Sloten, Fabio Catani. Load Sharing and Ligament Strains after Unicompartmental Knee Arthroplasty. A Validated Finite Element Analysis. AAOS 2014, March 11-15, NewOrleans, LO.
C127. Jean Brilhault, Silvia Pianigiani, Alessandro Navacchia, Luc Labey, Walter Pascale, Vincenzo Parenti Castelli, Bernardo Innocenti. Does Bone Quality Alter Mechanical Performances of All-Polyethylene and Metal-Backed TKA Tibial Component? AAOS 2014, March 11-15, New Orleans, LO.
C128. Jean Brilhault, Silvia Pianigiani, Alessandro Navacchia, Luc Labey, Walter Pascale, Vincenzo Parenti Castelli, Bernardo Innocenti. Are All-Polyethylene tibial components a viable biomechanical alternative in UKA and TKA? AAOS 2014, March 11-15, New Orleans, LO.

Journal reviewer:
Journal of Biomechanics, Clinical Orthopedics and Related Research, Journal of Arthroplasty, Medical Engineering and Physics, Computer Methods in Biomechanics and Biomedical Engineering Journal, Medical & Biological Engineering & Computing, Journal of Artificial Organs, Orthopaedic Research and Review Journal, Journal of Sports Engineering and Technology, Transactions on Biomedical Engineering.

Journal Editorial Board member:
Editor-in-Chief of International Journal of Sport Science.
Editor-in-Chief of Advances in Biomedical Engineering Research Journal.
Associate Editor of Frontiers in Biomechanics.

Moderator at International Conference:
- Session: Femur- Modelling & Endoprosthesis. ISB 2011, International Society of Biomechanics July 3rd -7th – Brussels, Belgium.

- Session: Robotics & Navigation. ISTA 2011 – International Society for Technology in Arthroplasty September 20th-23rd – Brugge, Belgium.
- Session: Joint Mechanics II. ESB 2013, European Society of Biomechanics, August 25th -28th – Patras, Greece.
- Session: Tissue Engineering of Tendon and Ligament – Part III. ISL&T XIII, International Symposium on Ligaments & Tendon, October 18th 2013 Arezzo, Italy.
- Session: Biomechanical Evaluation & Rehabilitation. EWL&T I, European Workshop on Ligament and Tendons, October 19th-20th 2013 Arezzo, Italy.

Scientific Exhibit:

SE 1. J. Victor, F. Van Glabbeek, P. Parizel, L. Labey, P. Wong, B. Innocenti, J. Somville, D. Van Donink, J. Bellemans. An experimental model for kinematic analysis of the knee. Scientific Exhibit 31, AAOS 2009 LasVegas NV.

SE 2. Jean-Philippe Luyckx, Nele Arnout, Luc Vanlommel, Jan Vanlomme, Luc Labey, Bernardo Innocenti, Jan Victor, Johan Bellemans. Dynamic In Vitro Analysis of Post-Cam Mechanism in Posterior Stabilized Total Knee Arthroplasty Designs. Scientific Exhibit 27, AAOS 2012, San Francisco, CA.

SE 3. Silvia Pianigiani, Nicholas Dunbar, Bernardo Innocenti, Luc Labey, Jan M. Victor, Johan Bellemans, Scott A. Banks. Total Knee Arthroplasty Fingerprints: A Tool to Characterize Surgical Variability of Several Designs. Scientific Exhibit 32, AAOS 2012, San Francisco, CA.

SE 4. Jean Brilhault, Silvia Pianigiani, Alessandro Navacchia, Luc Labey, Walter Pascale, Vincenzo Parenti Castelli, Bernardo Innocenti. Are All-Polyethylene tibial components a viable biomechanical alternative in UKA and TKA? AAOS 2014, March 11-15, New Orleans, LO.

Prizes:

Marc Coventry Award for the Best Basic Science Paper AAOS 2009:

Bernardo Innocenti, Fabio Catani, Claudio Belvedere, Luc Labey, Andrea Ensini, Alberto Leardini. In Vivo Knee Kinematics and FEA Simulation of Guided Motion Total Knee Arthroplasty. Specialty Days AAOS 2009 LasVegas NV.

Richard S. Laskin, MD, Research Award Annual Holiday Total Knee Course 2011:

Thomas J Heyse, Bilal F El-Zayat, Yan Chevalier, Ronny De Corte, Bernardo Innocenti, Suzanne Fuchs-Winkelmann, Luc Labey. Unicondylar Knee Arthroplasty kinematics in vitro. 23rd Annual Holiday Total Knee Course 1-2 December 2011.

ESSKA 2012 – Best Poster Award – Category Degerative:

Suzanne Fuchs-Winkelmann, Bilal F. El-Zayat, Thomas J. Heyse, Nelson Fanciullacci, Yan Chevalier and Bernardo Innocenti. Analysis of cemented and cementless, short and long stem in a hinged Total Knee Arthroplasty (TKA): a numerical study. 15th ESSKA Congress, May 2nd-5th , 2012, Geneva, Switzerland.

Bruxelles, May 5th 2014

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