

Contents

Papers

- B.A. Pickup and S.L. Thomson 2219 **Influence of asymmetric stiffness on the structural and aerodynamic response of synthetic vocal fold models**
- M. Lee, M. Roan and B. Smith 2226 **An application of principal component analysis for lower body kinematics between loaded and unloaded walking**
- H.G. Kang and J.B. Dingwell 2231 **Dynamics and stability of muscle activations during walking in healthy young and older adults**
- O. Cornu, T. Schubert, X. Libouton, O. Manil, B. Godts, J. VanTomme, X. Banse and C. Delloye 2238 **Particle size influence in an impaction bone grafting model. Comparison of fresh-frozen and freeze-dried allografts**
- E. Rizzuto, A. Musarò, A. Catizone and Z. Del Prete 2243 **Measuring tendon properties in *mdx* mice: Cell viability and viscoelastic characteristics**
- Y.-R. Jeng, T.-T. Lin and D.-B. Shieh 2249 **Nanotribological characterization of tooth enamel rod affected by surface treatment**
- B.E. Zima-Kulisiewicz and A. Delgado 2255 **Synergetic microorganismic convection generated by *Opercularia asymmetrica* ciliates living in a colony as effective fluid transport on the micro-scale**
- G. Fortuny, J. Rodríguez-Navarro, A. Susín and M. López-Cano 2263 **Simulation and study of the behaviour of the transversalis fascia in protecting against the genesis of inguinal hernias**
- P.R. Rougier, F. Lachaume, J. Bourse, M. Rogeon, A. Monti and S.C. Regueme 2268 **Wearing shoes increasing dorsiflexion improves short-term but not long-term balance control in young healthy adults**
- R.C. Browning, C.P. McGowan and R. Kram 2273 **Obesity does not increase external mechanical work per kilogram body mass during walking**
- A.J. Michalek, M.R. Buckley, L.J. Bonassar, I. Cohen and J.C. Iatridis 2279 **Measurement of local strains in intervertebral disc anulus fibrosus tissue under dynamic shear: Contributions of matrix fiber orientation and elastin content**
- M.M. Wachowski, M. Mansour, C. Lee, A. Ackenhausen, S. Spiering, J. Fanghänel, C. Dumont, D. Kubein-Meesenburg and H. Nägerl 2286 **How do spinal segments move?**
- C.R. Winby, D.G. Lloyd, T.F. Besier and T.B. Kirk 2294 **Muscle and external load contribution to knee joint contact loads during normal gait**
- J. Ghaboussi, T.-H. Kwon, D.A. Pecknold and Y.M.A. Hashash 2301 **Accurate intraocular pressure prediction from applanation response data using genetic algorithm and neural networks**
- C. Anglin, C. Fu, A.J. Hodgson, N. Helmy, N.V. Greidanus and B.A. Masri 2307 **Finding and defining the ideal patellar resection plane in total knee arthroplasty**
- A. Sogabe, N. Mukai, S. Miyakawa, N. Mesaki, K. Maeda, T. Yamamoto, P.M. Gallagher, M. Schrage and A.C. Fry 2313 **Influence of knee alignment on quadriceps cross-sectional area**
- T. Buckley, C. Pitsikoulis, E. Barthelemy and C.J. Hass 2318 **Age impairs sit-to-walk motor performance**
- A.M. Merican, S. Sanghavi, F. Iranpour and A.A. Amis 2323 **The structural properties of the lateral retinaculum and capsular complex of the knee**

Continued on inside back cover



ELSEVIER

Available online at

 ScienceDirect

www.sciencedirect.com



0021-9290(20091016)42:14;1-C

Continued from outside back cover

- J. Favre, R. Aissaoui, B.M. Jolles, J.A. de Guise and K. Aminian 2330 **Functional calibration procedure for 3D knee joint angle description using inertial sensors**
- E.-J. Lee and W. Herzog 2336 **Shortening-induced force depression is primarily caused by cross-bridges in strongly bound states**
- M.A. Baldwin, C. Clary, L.P. Maletsky and P.J. Rullkoetter 2341 **Verification of predicted specimen-specific natural and implanted patellofemoral kinematics during simulated deep knee bend**
- T.-M. Wang, H.-C. Yen, T.-W. Lu, H.-L. Chen, C.-F. Chang, Y.-H. Liu and W.-C. Tsai 2349 **Bilateral knee osteoarthritis does not affect inter-joint coordination in older adults with gait deviations during obstacle-crossing**
- F. Fraysse, R. Dumas, L. Cheze and X. Wang 2357 **Comparison of global and joint-to-joint methods for estimating the hip joint load and the muscle forces during walking**
- V. Ngai and M.A. Wimmer 2363 **Kinematic evaluation of cruciate-retaining total knee replacement patients during level walking: A comparison with the displacement-controlled ISO standard**
- M.A.G. Merckx, M. van 't Veer, L. Speelman, M. Breeuwer, J. Buth and F.N. van de Vosse 2369 **Importance of initial stress for abdominal aortic aneurysm wall motion: Dynamic MRI validated finite element analysis**
- T.R. Souza, S.T. Fonseca, G.G. Gonçalves, J.M. Ocarino and M.C. Mancini 2374 **Prestress revealed by passive co-tension at the ankle joint**
- A. Benoit, S. Guérard, B. Gillet, G. Guillot, F. Hild, D. Mitton, J.-N. Périé and S. Roux 2381 **3D analysis from micro-MRI during *in situ* compression on cancellous bone**
- E.K. Laende, K.J. Deluzio, A.W. Hennigar and M.J. Dunbar 2387 **Implementation and validation of an implant-based coordinate system for RSA migration calculation**
- X. Wang, L. Yang, Y. Liu, W. Gao, W. Peng, K.-L. Paul Sung and L. Amy Sung 2394 **Oxidized low-density lipoprotein (Ox-LDL) impacts on erythrocyte viscoelasticity and its molecular mechanism**
- Short Communications*
- Y. Blum, S.W. Lipfert and A. Seyfarth 2400 **Effective leg stiffness in running**
- G.S. Faber, I. Kingma, S.M. Bruijn and J.H. van Dieën 2406 **Optimal inertial sensor location for ambulatory measurement of trunk inclination**
- M. Bergomi, H.W. Anselm Wiskott, J. Botsis, T. Shibata and U.C. Belser 2410 **Mechanical response of periodontal ligament: Effects of specimen geometry, preconditioning cycles and time lapse**
- A. Rahimi, R. Klein, L. Keilig, M. Abboud, G. Wahl and C. Bourauel 2415 **Development and design of a novel loading device for the investigation of bone adaptation around immediately loaded dental implants using the reindeer antler as implant bed**
- Announcement*
- 2419 **Call for Abstracts, 17th Congress of the European Society of Biomechanics, Edinburgh, Scotland, UK, July 5th–July 8th, 2010**

Abstracted/indexed in: *Appl. Mech. Rev.*, *Res. Alert*, *Biosis Data.*, *Bioeng. Abstr.*, *Cam. Sci. Abstr.*, *Curr. Cont./Life Sci.*, *EMBASE/Excerpta Medica*, *Elsevier BIOBASE Current Awareness in Biological Sciences*, *COMPENDEX*, *Engin. Indx Ann.*, *Ei Engin. Mtg. Eng. Ind.*, *Ergon. Abstr.*, *Excerpt. Med.*, *INSPEC Data.*, *Curr. Cont. ISI/BIOBASE Database*, *MEDLINE*, *Mechanics, Oper. Res. Manage. Sci.*, *PASCAL-CNRS Data.*, *Curr. Cont. Sci. Cit. Ind.*, *Curr. Cont. SCISEARCH Data.*, *Ind. Med.*, *Review*. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®.

