

Serge L Van Sint Jan

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

2,368
citations

236925

25
h-index

233421

45
g-index

102
all docs

102
docs citations

102
times ranked

2896
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Imaging Assessment of Thoracic Outlet Syndrome. <i>Radiographics</i> , 2006, 26, 1735-1750. | 3.3 | 227 |
| 2 | Validity and reliability of the Kinect within functional assessment activities: Comparison with standard stereophotogrammetry. <i>Gait and Posture</i> , 2014, 39, 593-598. | 1.4 | 220 |
| 3 | The use of commercial video games in rehabilitation: a systematic review. <i>International Journal of Rehabilitation Research</i> , 2016, 39, 277-290. | 1.3 | 207 |
| 4 | The effects of embalming using a 4% formalin solution on the compressive mechanical properties of human cortical bone. <i>Clinical Biomechanics</i> , 2008, 23, 1294-1298. | 1.2 | 122 |
| 5 | The EuroPhysiome, STEP and a roadmap for the virtual physiological human. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 2979-2999. | 3.4 | 92 |
| 6 | The Virtual Physiological Human – A European Initiative for in silico Human Modelling –. <i>Journal of Physiological Sciences</i> , 2008, 58, 441-446. | 2.1 | 74 |
| 7 | Registration of 6-DOFs electrogoniometry and CT medical imaging for 3D joint modeling. <i>Journal of Biomechanics</i> , 2002, 35, 1475-1484. | 2.1 | 73 |
| 8 | Can serious games be incorporated with conventional treatment of children with cerebral palsy? A review. <i>Research in Developmental Disabilities</i> , 2014, 35, 1899-1913. | 2.2 | 68 |
| 9 | Identifying the location of human skeletal landmarks: why standardized definitions are necessary—a proposal. <i>Clinical Biomechanics</i> , 2005, 20, 659-660. | 1.2 | 52 |
| 10 | Structural behaviour and strain distribution of the long bones of the human lower limbs. <i>Journal of Biomechanics</i> , 2010, 43, 826-835. | 2.1 | 48 |
| 11 | Determination of the precision and accuracy of morphological measurements using the Kinect, a sensor: comparison with standard stereophotogrammetry. <i>Ergonomics</i> , 2014, 57, 622-631. | 2.1 | 44 |
| 12 | Effect of sub-optimal neuromotor control on the hip joint load during level walking. <i>Journal of Biomechanics</i> , 2011, 44, 1716-1721. | 2.1 | 42 |
| 13 | Precision of shoulder anatomical landmark calibration by two approaches: A CAST-like protocol and a new anatomical palpator method. <i>Gait and Posture</i> , 2009, 29, 587-591. | 1.4 | 40 |
| 14 | In vivo thorax 3D modelling from costovertebral joint complex kinematics. <i>Clinical Biomechanics</i> , 2014, 29, 434-438. | 1.2 | 40 |
| 15 | Multiscale modelling of the skeleton for the prediction of the risk of fracture. <i>Clinical Biomechanics</i> , 2008, 23, 845-852. | 1.2 | 36 |
| 16 | Balance improvement after physical therapy training using specially developed serious games for cerebral palsy children: preliminary results. <i>Disability and Rehabilitation</i> , 2017, 39, 403-406. | 1.8 | 35 |
| 17 | Multimod Data Manager: A tool for data fusion. <i>Computer Methods and Programs in Biomedicine</i> , 2007, 87, 148-159. | 4.7 | 34 |
| 18 | Double-step registration of in vivo stereophotogrammetry with both in vitro 6-DOFs electrogoniometry and CT medical imaging. <i>Journal of Biomechanics</i> , 2006, 39, 2087-2095. | 2.1 | 32 |

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|----|--|-----|-----------|
| 19 | Femur shape prediction by multiple regression based on quadric surface fitting. <i>Journal of Biomechanics</i> , 2011, 44, 712-718. | 2.1 | 32 |
| 20 | In vitro 3D-kinematics of the upper cervical spine: helical axis and simulation for axial rotation and flexion extension. <i>Surgical and Radiologic Anatomy</i> , 2010, 32, 141-151. | 1.2 | 31 |
| 21 | Joint kinematics simulation from medical imaging data. <i>IEEE Transactions on Biomedical Engineering</i> , 1997, 44, 1175-1184. | 4.2 | 30 |
| 22 | Sex determination using the Probabilistic Sex Diagnosis (DSP: Diagnose Sexuelle Probabiliste) tool in a virtual environment. <i>Forensic Science International</i> , 2014, 234, 189.e1-189.e8. | 2.2 | 29 |
| 23 | Model-based approach for human kinematics reconstruction from markerless and marker-based motion analysis systems. <i>Journal of Biomechanics</i> , 2013, 46, 2363-2371. | 2.1 | 28 |
| 24 | The thenar muscles. <i>Surgical and Radiologic Anatomy</i> , 1992, 14, 325-329. | 1.2 | 26 |
| 25 | A novel method for in-vivo evaluation of finger kinematics including definition of healthy motion patterns. <i>Clinical Biomechanics</i> , 2016, 31, 47-58. | 1.2 | 26 |
| 26 | Calibration and validation of 6 DOFs instrumented spatial linkage for biomechanical applications. A practical approach. <i>Medical Engineering and Physics</i> , 2004, 26, 251-260. | 1.7 | 25 |
| 27 | The lacertus fibrosus of the biceps brachii muscle: an anatomical study. <i>Surgical and Radiologic Anatomy</i> , 2014, 36, 713-9. | 1.2 | 25 |
| 28 | Low-dose computed tomography: A solution for in vivo medical imaging and accurate patient-specific 3D bone modeling?. <i>Clinical Biomechanics</i> , 2006, 21, 992-998. | 1.2 | 24 |
| 29 | Musculoskeletal Modeling of the Suboccipital Spine. <i>Spine</i> , 2011, 36, E413-E422. | 2.0 | 24 |
| 30 | Development of multimedia learning modules for teaching human anatomy: Application to osteology and functional anatomy. <i>The Anatomical Record</i> , 2003, 272B, 98-106. | 1.8 | 22 |
| 31 | Automated functional upper limb evaluation of patients with Friedreich ataxia using serious games rehabilitation exercises. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2018, 15, 87. | 4.6 | 22 |
| 32 | 3D Analysis of Upper Limbs Motion during Rehabilitation Exercises Using the Kinect™ Sensor: Development, Laboratory Validation and Clinical Application. <i>Sensors</i> , 2018, 18, 2216. | 3.8 | 21 |
| 33 | The insertion of the extensor digitorum tendon on the proximal phalanx. <i>Journal of Hand Surgery</i> , 1996, 21, 69-76. | 1.6 | 20 |
| 34 | In Vivo Registration of Both Electrogoniometry and Medical Imaging: Development and Application on the Ankle Joint Complex. <i>IEEE Transactions on Biomedical Engineering</i> , 2006, 53, 759-762. | 4.2 | 20 |
| 35 | Introducing Anatomical and Physiological Accuracy in Computerized Anthropometry for Increasing the Clinical Usefulness of Modeling Systems. <i>Critical Reviews in Physical and Rehabilitation Medicine</i> , 2005, 17, 249-274. | 0.1 | 20 |
| 36 | Effects of proximal row carpectomy on wrist biomechanics: A cadaveric study. <i>Clinical Biomechanics</i> , 2011, 26, 718-724. | 1.2 | 19 |

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|----|--|-----|-----------|
| 37 | Methods for determining hip and lumbosacral joint centers in a seated position from external anatomical landmarks. <i>Journal of Biomechanics</i> , 2015, 48, 396-400. | 2.1 | 19 |
| 38 | The Use of Mobile Games to Assess Cognitive Function of Elderly with and without Cognitive Impairment. <i>Journal of Alzheimer's Disease</i> , 2018, 64, 1285-1293. | 2.6 | 19 |
| 39 | Data representation for joint kinematics simulation of the lower limb within an educational context. <i>Medical Engineering and Physics</i> , 2003, 25, 213-220. | 1.7 | 18 |
| 40 | Determination of Repeatability of Kinect Sensor. <i>Telemedicine Journal and E-Health</i> , 2014, 20, 451-453. | 2.8 | 18 |
| 41 | Femoral curvature variability in modern humans using three-dimensional quadric surface fitting. <i>Surgical and Radiologic Anatomy</i> , 2015, 37, 1169-1177. | 1.2 | 18 |
| 42 | Relationship between costovertebral joint kinematics and lung volume in supine humans. <i>Respiratory Physiology and Neurobiology</i> , 2016, 232, 57-65. | 1.6 | 18 |
| 43 | Validation of the Balance Board for Clinical Evaluation of Balance During Serious Gaming Rehabilitation Exercises. <i>Telemedicine Journal and E-Health</i> , 2016, 22, 709-717. | 2.8 | 18 |
| 44 | Anatomical variations of the intrinsic muscles of the thumb. <i>The Anatomical Record</i> , 1994, 238, 131-146. | 1.8 | 17 |
| 45 | Prediction of joint center location by customizable multiple regressions: Application to clavicle, scapula and humerus. <i>Journal of Biomechanics</i> , 2009, 42, 319-324. | 2.1 | 17 |
| 46 | Suitability of functional evaluation embedded in serious game rehabilitation exercises to assess motor development across lifespan. <i>Gait and Posture</i> , 2017, 57, 35-39. | 1.4 | 17 |
| 47 | Cost-effective (gaming) motion and balance devices for functional assessment: Need or hype?. <i>Journal of Biomechanics</i> , 2016, 49, 2561-2565. | 2.1 | 15 |
| 48 | Virtual reconstruction of the Neandertal lower limbs with an estimation of hamstring muscle moment arms. <i>Comptes Rendus - Palevol</i> , 2010, 9, 445-454. | 0.2 | 12 |
| 49 | Foot roll-over evaluation based on 3D dynamic foot scan. <i>Gait and Posture</i> , 2014, 39, 577-582. | 1.4 | 12 |
| 50 | In-vivo analysis of sternal angle, sternal and sternocostal kinematics in supine humans during breathing. <i>Journal of Biomechanics</i> , 2017, 64, 32-40. | 2.1 | 11 |
| 51 | Impact of the mandibular divergence on the position of the inferior alveolar nerve and mylohyoid nerve: a computed tomography study and its relevance to bilateral sagittal split osteotomy. <i>Surgical and Radiologic Anatomy</i> , 2013, 35, 241-247. | 1.2 | 10 |
| 52 | Effect of anatomical landmark perturbation on mean helical axis parameters of in vivo upper costovertebral joints. <i>Journal of Biomechanics</i> , 2015, 48, 534-538. | 2.1 | 10 |
| 53 | Modelling towards a more holistic medicine: The Virtual Physiological Human (VPH). <i>Morphologie</i> , 2019, 103, 127-130. | 0.9 | 9 |
| 54 | Development and use of the strain gauge for study the constraint of tibio-femoral joint in dynamic movement: Feasibility and first results. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2005, 8, 259-260. | 1.6 | 8 |

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|----|---|-----|-----------|
| 55 | In vitro biomechanical study of femoral torsion disorders: Effect on moment arms of thigh muscles. <i>Clinical Biomechanics</i> , 2013, 28, 187-192. | 1.2 | 8 |
| 56 | Interchangeability of the Wii Balance Board for Bipedal Balance Assessment. <i>JMIR Rehabilitation and Assistive Technologies</i> , 2015, 2, e8. | 2.2 | 8 |
| 57 | Balance training using specially developed serious games for cerebral palsy children, a feasibility study. , 2014, , . | | 8 |
| 58 | The VAKHUM project: virtual animation of the kinematics of the human. <i>Theoretical Issues in Ergonomics Science</i> , 2005, 6, 277-279. | 1.8 | 7 |
| 59 | Quantified relationships of the radial nerve with the radial groove and selected humeral landmarks. <i>Surgical and Radiologic Anatomy</i> , 2008, 30, 627-631. | 1.2 | 7 |
| 60 | Tendon and fascial structure contributions to knee muscle excursions and knee joint displacement. <i>Clinical Biomechanics</i> , 2014, 29, 1070-1076. | 1.2 | 7 |
| 61 | Physiologically corrected coupled motion during gait analysis using a model-based approach. <i>Gait and Posture</i> , 2015, 41, 319-322. | 1.4 | 7 |
| 62 | Interaction Detection with Depth Sensing and Body Tracking Cameras in Physical Rehabilitation. <i>Methods of Information in Medicine</i> , 2016, 55, 70-78. | 1.2 | 7 |
| 63 | Pelvis and femur shape prediction using principal component analysis for body model on seat comfort assessment. Impact on the prediction of the used palpable anatomical landmarks as predictors. <i>PLoS ONE</i> , 2019, 14, e0221201. | 2.5 | 7 |
| 64 | A portable system for foot biomechanical analysis during gait. <i>Gait and Posture</i> , 2014, 40, 420-428. | 1.4 | 6 |
| 65 | The end of active video games and the consequences for rehabilitation. <i>Physiotherapy Research International</i> , 2018, 23, e1752. | 1.5 | 6 |
| 66 | Metatarsal arch deformation and forefoot kinematics during gait in asymptomatic subjects. <i>International Biomechanics</i> , 2019, 6, 75-84. | 1.0 | 6 |
| 67 | Comparison between two HNK-1-related antibodies immunoreactivity (HNK-1-anti-leu 7 and Tj ETQq1 1 0.784314 ggBT /Overlock 10 0.8 | 0.8 | 6 |
| 68 | Implementation of interactive motion representation (IMR) within the data manager. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2005, 8, 7-8. | 1.6 | 5 |
| 69 | Motion representation of the long fingers: A proposal for the definitions of new anatomical frames. <i>Journal of Biomechanics</i> , 2014, 47, 1299-1306. | 2.1 | 5 |
| 70 | Further consideration of the curvature of the Neandertal Femur. <i>American Journal of Physical Anthropology</i> , 2018, 165, 94-107. | 2.1 | 5 |
| 71 | Multimodal visualization interface for data management, self-learning and data presentation. <i>Surgical and Radiologic Anatomy</i> , 2006, 28, 518-524. | 1.2 | 4 |
| 72 | Hand skin reconstruction from skeletal landmarks. <i>International Journal of Legal Medicine</i> , 2007, 121, 511-515. | 2.2 | 4 |

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|----|---|-----|-----------|
| 73 | Validation of the Wii Balance Board to assess balance modifications induced by increased respiratory loads in healthy subjects. <i>Gait and Posture</i> , 2019, 68, 449-452. | 1.4 | 4 |
| 74 | Modern visualisation tools for research and education in biomechanics. , 0, , . | | 3 |
| 75 | Use of embedded strain gages for the in-vitro study of proximal tibial cancellous bone deformation during knee flexion-extension movement: development, reproducibility and preliminary results of feasibility after frontal low femoral osteotomy. <i>Journal of Orthopaedic Surgery and Research</i> , 2011, 6, 12. | 2.3 | 3 |
| 76 | In vitro biomechanical study of femoral torsion disorders: effect on tibial proximal epiphyseal cancellous bone deformation. <i>Surgical and Radiologic Anatomy</i> , 2011, 33, 439-449. | 1.2 | 3 |
| 77 | DIFFERENCES BETWEEN CONTRALATERAL BONES OF THE HUMAN LOWER LIMBS: A MULTISCALE INVESTIGATION. <i>Journal of Mechanics in Medicine and Biology</i> , 2014, 14, 1450032. | 0.7 | 3 |
| 78 | Prediction of the drilling path to surgically pin the femoral neck from the spatial location of pelvic and femoral anatomical landmarks: A cadaver validation study. <i>Medical Engineering and Physics</i> , 2017, 40, 117-121. | 1.7 | 3 |
| 79 | Validation of the Wii Balance Board to assess static balance during dual-task activity in healthy subjects. <i>Medicine in Novel Technology and Devices</i> , 2019, 1, 100003. | 1.6 | 3 |
| 80 | The biomechanical role of the lacertus fibrosus of the biceps brachii Muscle. <i>Surgical and Radiologic Anatomy</i> , 2021, 43, 1587-1594. | 1.2 | 3 |
| 81 | How different are the Kebara 2 ribs to modern humans?. <i>Journal of Anthropological Sciences</i> , 2017, 95, 183-201. | 0.4 | 3 |
| 82 | 3D muscle moment arms using musculoskeletal modelling of the upper cervical spine. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2005, 8, 83-84. | 1.6 | 2 |
| 83 | Medicine and the Virtual Physiological Human. , 2019, , 577-589. | | 2 |
| 84 | High resolution magnetic resonance imaging application in anatomy: the extensor digitorum muscle insertion on the first phalanx. <i>Magnetic Resonance Materials in Physics, Biology, and Medicine</i> , 1997, 5, 21-27. | 2.0 | 1 |
| 85 | Effects of Irradiation and Methyl-Triazene on Craniofacial Development in Mouse Embryos: A Semiautomated Morphometric Analysis. <i>Cleft Palate-Craniofacial Journal</i> , 1998, 35, 342-350. | 0.9 | 1 |
| 86 | Upper cervical spine modelling:in-vitro3D kinematics and helical axis estimation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2005, 8, 87-88. | 1.6 | 1 |
| 87 | Hip joint centre location from anatomical landmarks for automotive seated posture reconstruction. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2013, 16, 195-197. | 1.6 | 1 |
| 88 | Biomechanical Analysis of Rehabilitation Exercises Performed During Serious Games Exercises. <i>Lecture Notes in Computer Science</i> , 2016, , 302-311. | 1.3 | 1 |
| 89 | The use of cognitive mobile games to assess cognitive function of healthy subjects under various inspiratory loads. <i>Medicine in Novel Technology and Devices</i> , 2019, 1, 100005. | 1.6 | 1 |
| 90 | Interactive visualization of morphological and kinematic data of human movement. , 2005, , . | | 0 |

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|----|---|-----|-----------|
| 91 | “When two make less than one” Exploratory study of an weight illusion. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 247-248. | 1.6 | 0 |
| 92 | In vivokinematics of human wrist joints: Combination of medical imaging and three-dimensional electrogoniometry. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 249-250. | 1.6 | 0 |
| 93 | Detection of Interaction with Depth Sensing and Body Tracking Cameras in Physical Rehabilitation. Communications in Computer and Information Science, 2015, , 306-317. | 0.5 | 0 |
| 94 | Validation of the Balance Board“ for Clinical Evaluation of Balance Through Different Conditions. Communications in Computer and Information Science, 2015, , 11-23. | 0.5 | 0 |
| 95 | Quantification of the relative orientation and position of the mandibular condyles. Morphologie, 2021, 105, 275-280. | 0.9 | 0 |
| 96 | Combined Motions of the Shoulder Joint Complex for Model-Based Simulation: Modeling of the Shoulder Rhythm (ShRm). , 2014, , 205-232. | | 0 |
| 97 | Challenges in the system modeling of the musculoskeletal apparatus. , 2022, , 585-607. | | 0 |