Serge L Van Sint Jan

List of Publications by Year
in descending order

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	Challenges in the system modeling of the musculoskeletal apparatus. , 2022, , 585-607.		0
2	Quantification of the relative orientation and position of the mandibular condyles. Morphologie, 2021, 105, 275-280.	0.9	0
3	The biomechanical role of the lacertus fibrosus of the biceps brachii Muscle. Surgical and Radiologic Anatomy, 2021, 43, 1587-1594.	1.2	3
4	Metatarsal arch deformation and forefoot kinematics during gait in asymptomatic subjects. International Biomechanics, 2019, 6, 75-84.	1.0	6
5	Validation of the Wii Balance Board to assess static balance during dual-task activity in healthy subjects. Medicine in Novel Technology and Devices, 2019, 1, 100003.	1.6	3
6	Medicine and the Virtual Physiological Human. , 2019, , 577-589.		2
7	The use of cognitive mobile games to assess cognitive function of healthy subjects under various inspiratory loads. Medicine in Novel Technology and Devices, 2019, 1, 100005.	1.6	1
8	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. PLoS ONE, 2019, 14, e0221201.	2.5	7
9	Validation of the Wii Balance Board to assess balance modifications induced by increased respiratory loads in healthy subjects. Gait and Posture, 2019, 68, 449-452.	1.4	4
10	Modelling towards a more holistic medicine: The Virtual Physiological Human (VPH). Morphologie, 2019, 103, 127-130.	0.9	9
11	Further consideration of the curvature of the Neandertal Femur. American Journal of Physical Anthropology, 2018, 165, 94-107.	2.1	5
12	Automated functional upper limb evaluation of patients with Friedreich ataxia using serious games rehabilitation exercises. Journal of NeuroEngineering and Rehabilitation, 2018, 15, 87.	4.6	22
13	The end of active video games and the consequences for rehabilitation. Physiotherapy Research International, 2018, 23, e1752.	1.5	6
14	The Use of Mobile Games to Assess Cognitive Function of Elderly with and without Cognitive Impairment. Journal of Alzheimer's Disease, 2018, 64, 1285-1293.	2.6	19
15	3D Analysis of Upper Limbs Motion during Rehabilitation Exercises Using the KinectTM Sensor: Development, Laboratory Validation and Clinical Application. Sensors, 2018, 18, 2216.	3.8	21
16	Balance improvement after physical therapy training using specially developed serious games for cerebral palsy children: preliminary results. Disability and Rehabilitation, 2017, 39, 403-406.	1.8	35
17	Suitability of functional evaluation embedded in serious game rehabilitation exercises to assess motor development across lifespan. Gait and Posture, 2017, 57, 35-39.	1.4	17
18	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. Medical Engineering and Physics, 2017, 40, 117-121.	1.7	3

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19	In-vivo analysis of sternal angle, sternal and sternocostal kinematics in supine humans during breathing. Journal of Biomechanics, 2017, 64, 32-40.	2.1	11
20	How different are the Kebara 2 ribs to modern humans?. Journal of Anthropological Sciences, 2017, 95, 183-201.	0.4	3
21	Interaction Detection with Depth Sensing and Body Tracking Cameras in Physical Rehabilitation. Methods of Information in Medicine, 2016, 55, 70-78.	1.2	7
22	The use of commercial video games in rehabilitation: a systematic review. International Journal of Rehabilitation Research, 2016, 39, 277-290.	1.3	207
23	Cost-effective (gaming) motion and balance devices for functional assessment: Need or hype?. Journal of Biomechanics, 2016, 49, 2561-2565.	2.1	15
24	Relationship between costovertebral joint kinematics and lung volume in supine humans. Respiratory Physiology and Neurobiology, 2016, 232, 57-65.	1.6	18
25	Biomechanical Analysis of Rehabilitation Exercises Performed During Serious Games Exercises. Lecture Notes in Computer Science, 2016, , 302-311.	1.3	1
26	Validation of the Balance Board for Clinical Evaluation of Balance During Serious Gaming Rehabilitation Exercises. Telemedicine Journal and E-Health, 2016, 22, 709-717.	2.8	18
27	A novel method for in-vivo evaluation of finger kinematics including definition of healthy motion patterns. Clinical Biomechanics, 2016, 31, 47-58.	1.2	26
28	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
29	Validation of the Balance Boardâ„¢ for Clinical Evaluation of Balance Through Different Conditions. Communications in Computer and Information Science, 2015, , 11-23.	0.5	0
30	Interchangeability of the Wii Balance Board for Bipedal Balance Assessment. JMIR Rehabilitation and Assistive Technologies, 2015, 2, e8.	2.2	8
31	Methods for determining hip and lumbosacral joint centers in a seated position from external anatomical landmarks. Journal of Biomechanics, 2015, 48, 396-400.	2.1	19
32	Effect of anatomical landmark perturbation on mean helical axis parameters of in vivo upper costovertebral joints. Journal of Biomechanics, 2015, 48, 534-538.	2.1	10
33	Femoral curvature variability in modern humans using three-dimensional quadric surface fitting. Surgical and Radiologic Anatomy, 2015, 37, 1169-1177.	1.2	18
34	Physiologically corrected coupled motion during gait analysis using a model-based approach. Gait and Posture, 2015, 41, 319-322.	1.4	7
35	Determination of Repeatability of Kinect Sensor. Telemedicine Journal and E-Health, 2014, 20, 451-453.	2.8	18
36	DIFFERENCES BETWEEN CONTRALATERAL BONES OF THE HUMAN LOWER LIMBS: A MULTISCALE INVESTIGATION. Journal of Mechanics in Medicine and Biology, 2014, 14, 1450032.	0.7	3

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37	Foot roll-over evaluation based on 3D dynamic foot scan. Gait and Posture, 2014, 39, 577-582.	1.4	12
38	Motion representation of the long fingers: A proposal for the definitions of new anatomical frames. Journal of Biomechanics, 2014, 47, 1299-1306.	2.1	5
39	The lacertus fibrosus of the biceps brachii muscle: an anatomical study. Surgical and Radiologic Anatomy, 2014, 36, 713-9.	1.2	25
40	In vivo thorax 3D modelling from costovertebral joint complex kinematics. Clinical Biomechanics, 2014, 29, 434-438.	1.2	40
41	Tendon and fascial structure contributions to knee muscle excursions and knee joint displacement. Clinical Biomechanics, 2014, 29, 1070-1076.	1.2	7
42	Determination of the precision and accuracy of morphological measurements using the Kinectâ„¢ sensor: comparison with standard stereophotogrammetry. Ergonomics, 2014, 57, 622-631.	2.1	44
43	Can serious games be incorporated with conventional treatment of children with cerebral palsy? A review. Research in Developmental Disabilities, 2014, 35, 1899-1913.	2.2	68
44	Validity and reliability of the Kinect within functional assessment activities: Comparison with standard stereophotogrammetry. Gait and Posture, 2014, 39, 593-598.	1.4	220
45	Sex determination using the Probabilistic Sex Diagnosis (DSP: Diagnose Sexuelle Probabiliste) tool in a virtual environment. Forensic Science International, 2014, 234, 189.e1-189.e8.	2.2	29
46	A portable system for foot biomechanical analysis during gait. Gait and Posture, 2014, 40, 420-428.	1.4	6
47	Balance training using specially developed serious games for cerebral palsy children, a feasibility study. , 2014, , .		8
48	Combined Motions of the Shoulder Joint Complex for Model-Based Simulation: Modeling of the Shoulder Rhythm (ShRm). , 2014, , 205-232.		0
49	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. Surgical and Radiologic Anatomy, 2013, 35, 241-247.	1.2	10
50	Model-based approach for human kinematics reconstruction from markerless and marker-based motion analysis systems. Journal of Biomechanics, 2013, 46, 2363-2371.	2.1	28
51	Hip joint centre location from anatomical landmarks for automotive seated posture reconstruction. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 195-197.	1.6	1
52	In vitro biomechanical study of femoral torsion disorders: Effect on moment arms of thigh muscles. Clinical Biomechanics, 2013, 28, 187-192.	1.2	8
53	Effects of proximal row carpectomy on wrist biomechanics: A cadaveric study. Clinical Biomechanics, 2011, 26, 718-724.	1.2	19
54	Musculoskeletal Modeling of the Suboccipital Spine. Spine, 2011, 36, E413-E422.	2.0	24

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55	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. Journal of Orthopaedic Surgery and Research, 2011, 6, 12.	2.3	3
56	In vitro biomechanical study of femoral torsion disorders: effect on tibial proximal epiphyseal cancellous bone deformation. Surgical and Radiologic Anatomy, 2011, 33, 439-449.	1.2	3
57	Femur shape prediction by multiple regression based on quadric surface fitting. Journal of Biomechanics, 2011, 44, 712-718.	2.1	32
58	Effect of sub-optimal neuromotor control on the hip joint load during level walking. Journal of Biomechanics, 2011, 44, 1716-1721.	2.1	42
59	In vitro 3D-kinematics of the upper cervical spine: helical axis and simulation for axial rotation and flexion extension. Surgical and Radiologic Anatomy, 2010, 32, 141-151.	1.2	31
60	Structural behaviour and strain distribution of the long bones of the human lower limbs. Journal of Biomechanics, 2010, 43, 826-835.	2.1	48
61	Virtual reconstruction of the Neandertal lower limbs with an estimation of hamstring muscle moment arms. Comptes Rendus - Palevol, 2010, 9, 445-454.	0.2	12
62	Prediction of joint center location by customizable multiple regressions: Application to clavicle, scapula and humerus. Journal of Biomechanics, 2009, 42, 319-324.	2.1	17
63	Precision of shoulder anatomical landmark calibration by two approaches: A CAST-like protocol and a new anatomical palpator method. Gait and Posture, 2009, 29, 587-591.	1.4	40
64	Quantified relationships of the radial nerve with the radial groove and selected humeral landmarks. Surgical and Radiologic Anatomy, 2008, 30, 627-631.	1.2	7
65	Multiscale modelling of the skeleton for the prediction of the risk of fracture. Clinical Biomechanics, 2008, 23, 845-852.	1.2	36
66	The effects of embalming using a 4% formalin solution on the compressive mechanical properties of human cortical bone. Clinical Biomechanics, 2008, 23, 1294-1298.	1.2	122
67	The EuroPhysiome, STEP and a roadmap for the virtual physiological human. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2008, 366, 2979-2999.	3.4	92
68	The Virtual Physiological Human â€" A European Initiative for in silico Human Modelling â€". Journal of Physiological Sciences, 2008, 58, 441-446.	2.1	74
69	Multimod Data Manager: A tool for data fusion. Computer Methods and Programs in Biomedicine, 2007, 87, 148-159.	4.7	34
70	Hand skin reconstruction from skeletal landmarks. International Journal of Legal Medicine, 2007, 121, 511-515.	2.2	4
71	Low-dose computed tomography: A solution for in vivo medical imaging and accurate patient-specific 3D bone modeling?. Clinical Biomechanics, 2006, 21, 992-998.	1.2	24
72	Multimodal visualization interface for data management, self-learning and data presentation. Surgical and Radiologic Anatomy, 2006, 28, 518-524.	1.2	4

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73	Double-step registration of in vivo stereophotogrammetry with both in vitro 6-DOFs electrogoniometry and CT medical imaging. Journal of Biomechanics, 2006, 39, 2087-2095.	2.1	32
74	In Vivo Registration of Both Electrogoniometry and Medical Imaging: Development and Application on the Ankle Joint Complex. IEEE Transactions on Biomedical Engineering, 2006, 53, 759-762.	4.2	20
75	Imaging Assessment of Thoracic Outlet Syndrome. Radiographics, 2006, 26, 1735-1750.	3.3	227
76	Interactive visualization of morphological and kinematic data of human movement. , 2005, , .		0
77	3D muscle moment arms using musculoskeletal modelling of the upper cervical spine. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 83-84.	1.6	2
78	â€œWhen two make less than oneâ€: Exploratory study of an weight illusion. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 247-248.	1.6	0
79	The VAKHUM project: virtual animation of the kinematics of the human. Theoretical Issues in Ergonomics Science, 2005, 6, 277-279.	1.8	7
80	Upper cervical spine modelling:in-vitro3D kinematics and helical axis estimation. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 87-88.	1.6	1
81	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
82	Development and use of the strain gauge for study the constraint of tibio-femoral joint in dynamic movement: Feasibility and first results. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 259-260.	1.6	8
83	Implementation of interactive motion representation (IMR) within the data manager. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 7-8.	1.6	5
84	Identifying the location of human skeletal landmarks: why standardized definitions are necessary--a proposal. Clinical Biomechanics, 2005, 20, 659-660.	1.2	52
85	Introducing Anatomical and Physiological Accuracy in Computerized Anthropometry for Increasing the Clinical Usefulness of Modeling Systems. Critical Reviews in Physical and Rehabilitation Medicine, 2005, 17, 249-274.	0.1	20
86	Calibration and validation of 6 DOFs instrumented spatial linkage for biomechanical applications. A practical approach. Medical Engineering and Physics, 2004, 26, 251-260.	1.7	25
87	Development of multimedia learning modules for teaching human anatomy: Application to osteology and functional anatomy. The Anatomical Record, 2003, 272B, 98-106.	1.8	22
88	Data representation for joint kinematics simulation of the lower limb within an educational context. Medical Engineering and Physics, 2003, 25, 213-220.	1.7	18
89	Registration of 6-DOFs electrogoniometry and CT medical imaging for 3D joint modeling. Journal of Biomechanics, 2002, 35, 1475-1484.	2.1	73
90	Effects of Irradiation and Methyl-Triazene on Craniofacial Development in Mouse Embryos: A Semiautomated Morphometric Analysis. Cleft Palate-Craniofacial Journal, 1998, 35, 342-350.	0.9	1

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91	Joint kinematics simulation from medical imaging data. IEEE Transactions on Biomedical Engineering, 1997, 44, 1175-1184.	4.2	30
92	High resolution magnetic resonance imaging application in anatomy: the extensor digitorum muscle insertion on the first phalanx. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1997, 5, 21-27.	2.0	1
93	The insertion of the extensor digitorum tendon on the proximal phalanx. Journal of Hand Surgery, 1996, 21, 69-76.	1.6	20
94	Comparison between two HNK-1-related antibodies immunoreactivity (HNK-1-anti-leu 7 and) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 T	0.8	6
95	Anatomical variations of the intrinsic muscles of the thumb. The Anatomical Record, 1994, 238, 131-146.	1.8	17
96	The thenar muscles. Surgical and Radiologic Anatomy, 1992, 14, 325-329.	1.2	26
97	Modern visualisation tools for research and education in biomechanics. , 0, , .		3