Raphael Dumas

List of Publications by Year
in descending order

168 papers	3,627 citations	147801 31 h-index	175258 52 g-index
187 all docs	187 docs citations	187 times ranked	2542 citing authors

#	Article	IF	Citations
1	Dynamic estimation of soft tissue stiffness for use in modeling socket, orthosis or exoskeleton interfaces with lower limb segments. Journal of Biomechanics, 2022, 134, 110987.	2.1	4
2	Subject-specific model-derived kinematics of the shoulder based on skin markers during arm abduction up to 180Â° - assessment of 4 gleno-humeral joint models. Journal of Biomechanics, 2022, 136, 111061.	2.1	2
3	Changes in ankle and foot kinematic after fixed-bearing total ankle replacement. Journal of Biomechanics, 2022, 136, 111060.	2.1	1
4	Uncertainty analysis and sensitivity of scapulothoracic joint angles to kinematic model parameters. Medical and Biological Engineering and Computing, 2022, 60, 2065-2075.	2.8	2
5	The effect of ankle and hindfoot malalignment on foot mechanics in patients suffering from post-traumatic ankle osteoarthritis. Clinical Biomechanics, 2021, 81, 105239.	1.2	8
6	Sparse Visual-Inertial Measurement Units Placement for Gait Kinematics Assessment. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 1300-1311.	4.9	2
7	Impact of foot modeling on the quantification of the effect of total ankle replacement: A pilot study. Gait and Posture, 2021, 84, 308-314.	1.4	5
8	Knee loading in OA subjects is correlated to flexion and adduction moments and to contact point locations. Scientific Reports, 2021, 11, 8594.	3.3	13
9	Post-sprain versus post-fracture post-traumatic ankle osteoarthritis: Impact on foot and ankle kinematics and kinetics. Gait and Posture, 2021, 86, 278-286.	1.4	9
10	Contribution of passive moments to inter-segmental moments during gait: A systematic review. Journal of Biomechanics, 2021, 122, 110450.	2.1	5
11	ISB recommendations on the reporting of intersegmental forces and moments during human motion analysis. Journal of Biomechanics, 2020, 99, 109533.	2.1	104
12	A method for quantitative evaluation of a valgus knee orthosis using biplane x-ray images. , 2020, 2020, 4815-4818.		0
13	The effect of anterolateral ligament reconstruction on knee constraint: A computer model-based simulation study. Knee, 2020, 27, 1228-1237.	1.6	4
14	The contribution of passive moments to inter-segmental moments during gait: a systematic review. Gait and Posture, 2020, 81, 194-195.	1.4	0
15	Accuracy of the tibiofemoral contact forces estimated by a subject-specific musculoskeletal model with fluoroscopy-based contact point trajectories. Journal of Biomechanics, 2020, 113, 110117.	2.1	4
16	Sensitivity of conventional gait model to lower limb marker misplacement. Gait and Posture, 2020, 81, 101-102.	1.4	0
17	Dynamics Assessment and Minimal Model of an Orthosis-Assisted Knee Motion. , 2020, , .		0
18	Physically Consistent Whole-Body Kinematics Assessment Based on an RGB-D Sensor. Application to Simple Rehabilitation Exercises. Sensors, 2020, 20, 2848.	3.8	8

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19	Intrinsic foot joints adapt a stabilizedâ€resistive configuration during the stance phase. Journal of Foot and Ankle Research, 2020, 13, 13.	1.9	7
20	Impact of knee marker misplacement on gait kinematics of children with cerebral palsy using the Conventional Gait Modelâ€"A sensitivity study. PLoS ONE, 2020, 15, e0232064.	2.5	22
21	Knee Medial and Lateral Contact Forces Computed Along Subject-Specific Contact Point Trajectories of Healthy Volunteers and Osteoarthritic Patients. Lecture Notes in Computational Vision and Biomechanics, 2020, , 457-463.	0.5	4
22	Multibody Optimisations: From Kinematic Constraints to Knee Contact Forces and Ligament Forces. Springer Tracts in Advanced Robotics, 2019, , 65-89.	0.4	2
23	Comments on the â€œInfluence of the load modelling during gait on the stress distribution in a femoral implantâ€•by Gervais et al.. Multibody System Dynamics, 2019, 47, 435-437.	2.7	1
24	Motion analysis and modeling of the shoulder. , 2019, , 261-271.		1
25	IMU-based sensor-to-segment multiple calibration for upper limb joint angle measurementâ€"a proof of concept. Medical and Biological Engineering and Computing, 2019, 57, 2449-2460.	2.8	14
26	Can a reduction approach predict reliable joint contact and musculo-tendon forces?. Journal of Biomechanics, 2019, 95, 109329.	2.1	7
27	Correcting lower limb segment axis misalignment in gait analysis: A simple geometrical method. Gait and Posture, 2019, 72, 34-39.	1.4	4
28	Lateral extra-articular reconstruction length changes during weightbearing knee flexion and pivot shift: A simulation study. Orthopaedics and Traumatology: Surgery and Research, 2019, 105, 661-667.	2.0	2
29	A screening method to analyse the sensitivity of a lower limb multibody kinematic model. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 925-935.	1.6	2
30	Technical considerations in lateral extra-articular reconstruction coupled with anterior cruciate ligament reconstruction: A simulation study evaluating the influence of surgical parameters on control of knee stability. Clinical Biomechanics, 2019, 61, 136-143.	1.2	7
31	Knee medial and lateral contact forces in a musculoskeletal model with subject-specific contact point trajectories. Journal of Biomechanics, 2018, 69, 138-145.	2.1	16
32	Developmental changes in spatial margin of stability in typically developing children relate to the mechanics of gait. Gait and Posture, 2018, 63, 33-38.	1.4	22
33	Rotation sequence to report humerothoracic kinematics during 3D motion involving large horizontal component: application to the tennis forehand drive. Sports Biomechanics, 2018, 17, 131-141.	1.6	4
34	Multibody Kinematics Optimization for the Estimation of Upper and Lower Limb Human Joint Kinematics: A Systematized Methodological Review. Journal of Biomechanical Engineering, 2018, 140, .	1.3	56
35	Incidence and patterns of meniscal tears accompanying the anterior cruciate ligament injury: possible local and generalized risk factors. International Orthopaedics, 2018, 42, 2113-2121.	1.9	55
36	Estimation of the Body Segment Inertial Parameters for the Rigid Body Biomechanical Models Used in Motion Analysis. , 2018, , 47-77.		12

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37	Contribution of passive actions to the lower limb joint moments and powers during gait: A comparison of models. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2018, 232, 768-778.	1.8	5
38	Tibio-femoral joint contact in healthy and osteoarthritic knees during quasi-static squat: A bi-planar X-ray analysis. Journal of Biomechanics, 2017, 53, 178-184.	2.1	17
39	Comparative assessment of knee joint models used in multi-body kinematics optimisation for soft tissue artefact compensation. Journal of Biomechanics, 2017, 62, 95-101.	2.1	27
40	Individual muscle contributions to ground reaction and to joint contact, ligament and bone forces during normal gait. Multibody System Dynamics, 2017, 40, 193-211.	2.7	13
41	Proximal tibial bony and meniscal slopes are higher in ACL injured subjects than controls: a comparative MRI study. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 1598-1605.	4.2	37
42	Joint kinematics estimation using a multi-body kinematics optimisation and an extended Kalman filter, and embedding a soft tissue artefact model. Journal of Biomechanics, 2017, 62, 148-155.	2.1	19
43	Assessment of the lower limb soft tissue artefact at marker-cluster level with a high-density marker set during walking. Journal of Biomechanics, 2017, 62, 21-26.	2.1	15
44	A constrained extended Kalman filter for the optimal estimate of kinematics and kinetics of a sagittal symmetric exercise. Journal of Biomechanics, 2017, 62, 140-147.	2.1	11
45	Alterations of musculoskeletal models for a more accurate estimation of lower limb joint contact forces during normal gait: A systematic review. Journal of Biomechanics, 2017, 63, 8-20.	2.1	35
46	A sensitivity analysis method for the body segment inertial parameters based on ground reaction and joint moment regressor matrices. Journal of Biomechanics, 2017, 64, 85-92.	2.1	16
47	Human movement analysis: The soft tissue artefact issue. Journal of Biomechanics, 2017, 62, 1-4.	2.1	67
48	Relations between age, step-time parameters and margin of stability during gait in typically developing children. Gait and Posture, 2017, 57, 162-163.	1.4	0
49	Individual contributions of the lower limb muscles to the position of the centre of pressure during gait. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, S137-S138.	1.6	4
50	Whole body segment inertia parameters estimation from movement and ground reaction forces: a feasibility study. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, S175-S176.	1.6	2
51	Stiffness of a wobbling mass models analysed by a smooth orthogonal decomposition of the skin movement relative to the underlying bone. Journal of Biomechanics, 2017, 62, 47-52.	2.1	12
52	Gait Analysis of Transfemoral Amputees: Errors in Inverse Dynamics Are Substantial and Depend on Prosthetic Design. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 679-685.	4.9	34
53	Main component of soft tissue artifact of the upper-limbs with respect to different functional, daily life and sports movements. Journal of Biomechanics, 2017, 62, 39-46.	2.1	24
54	Glenohumeral contact force during flat and topspin tennis forehand drives. Sports Biomechanics, 2017, 16, 127-142.	1.6	12

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55	A multi-body optimization framework with a knee kinematic model including articular contacts and ligaments. Meccanica, 2017, 52, 695-711.	2.0	12
56	Can generic knee joint models improve the measurement of osteoarthritic knee kinematics during squatting activity?. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 94-103.	1.6	16
57	Estimation of body segment inertia parameters from 3D body scanner images: a semi-automatic method dedicated to human movement analysis applications. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, S177-S178.	1.6	4
58	Kinematics of the Normal Knee during Dynamic Activities: A Synthesis of Data from Intracortical Pins and Biplane Imaging. Applied Bionics and Biomechanics, 2017, 2017, 1-9.	1.1	11
59	Modeling of the Thigh. , 2017, , 497-521.		5
60	Estimation of the Body Segment Inertial Parameters for the Rigid Body Biomechanical Models Used in Motion Analysis. , 2017, , 1-31.		9
61	Knee Kinematics Estimation Using Multi-Body Optimisation Embedding a Knee Joint Stiffness Matrix: A Feasibility Study. PLoS ONE, 2016, 11, e0157010.	2.5	21
62	Modeling the Human Tibiofemoral Joint Using Ex Vivo Determined Compliance Matrices. Journal of Biomechanical Engineering, 2016, 138, 061010.	1.3	4
63	Dynamically consistent inverse kinematics framework using optimizations for human motion analysis. , 2016, , .		3
64	A simplified marker set to define the center of mass for stability analysis in dynamic situations. Gait and Posture, 2016, 48, 64-67.	1.4	52
65	A constrained Extended Kalman Filter for dynamically consistent inverse kinematics and inertial parameters identification. , 2016, , .		11
66	Contribution of individual musculo-tendon forces to the axial compression force of the femur during normal gait. Movement and Sports Sciences - Science Et Motricite, 2016, , 63-69.	0.3	3
67	Influence of the Level of Muscular Redundancy on the Validity of a Musculoskeletal Model. Journal of Biomechanical Engineering, 2016, 138, 021019.	1.3	15
68	Investigation of biomechanical strategies increasing walking speed in young children aged 1 to 7 years. Movement and Sports Sciences - Science Et Motricite, 2016, , 49-55.	0.3	0
69	How Does the Scapula Move during the Tennis Serve?. Medicine and Science in Sports and Exercise, 2015, 47, 1444-1449.	0.4	18
70	Postural spinal balance defined by net intersegmental moments: Results of a biomechanical approach and experimental errors measurement. World Journal of Orthopedics, 2015, 6, 983.	1.8	9
71	Upper Limb Kinematics Using Inertial and Magnetic Sensors: Comparison of Sensor-to-Segment Calibrations. Sensors, 2015, 15, 18813-18833.	3.8	101
72	State of the art and current limits of musculo-skeletal models for clinical applications. Movement and Sports Sciences - Science Et Motricite, 2015, , 7-17.	0.3	13

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73	Gait parameters database for young children: The influences of age and walking speed. Clinical Biomechanics, 2015, 30, 572-577.	1.2	29
74	What Portion of the Soft Tissue Artefact Requires Compensation When Estimating Joint Kinematics?. Journal of Biomechanical Engineering, 2015, 137, 064502.	1.3	25
75	A model of the soft tissue artefact rigid component. Journal of Biomechanics, 2015, 48, 1752-1759.	2.1	30
76	Thorax and abdomen body segment inertial parameters adjusted from McConville et al. and Young et al.. International Biomechanics, 2015, 2, 113-118.	1.0	26
77	Rigid and non-rigid geometrical transformations of a marker-cluster and their impact on bone-pose estimation. Journal of Biomechanics, 2015, 48, 4166-4172.	2.1	16
78	Validation of a multi-body optimization with knee kinematic models including ligament constraints. Journal of Biomechanics, 2015, 48, 1141-1146.	2.1	42
79	Global sensitivity analysis of the joint kinematics during gait to the parameters of a lower limb multi-body model. Medical and Biological Engineering and Computing, 2015, 53, 655-667.	2.8	28
80	Validity of a musculoskeletal model using two different geometries for estimating hip contact forces during normal walking. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 2000-2001.	1.6	8
81	Estimating joint space of the knee during weight-bearing squatting activity using motion capture â€“ preliminary results of a new method. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 1910-1911.	1.6	2
82	Comparison and validation of five scapulothoracic models for correcting soft tissue artefact through multibody optimisation. Computer Methods in Biomechanics and Biomedical Engineering, 2015, 18, 2014-2015.	1.6	5
83	Soft tissue artifact compensation in knee kinematics by multi-body optimization: Performance of subject-specific knee joint models. Journal of Biomechanics, 2015, 48, 3796-3802.	2.1	60
84	A parallel mechanism of the shoulderâ€”application to multi-body optimisation. Multibody System Dynamics, 2015, 33, 439-451.	2.7	19
85	Influence of biomechanical multi-joint models used in global optimisation to estimate healthy and osteoarthritis knee kinematics. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 76-77.	1.6	8
86	Letter to the Editor: Joint Moments in the Joint Coordinate System, Euler or Dual Euler Basis. Journal of Biomechanical Engineering, 2014, 136, 055501.	1.3	7
87	Scapulothoracic kinematics during tennis forehand drive. Sports Biomechanics, 2014, 13, 166-175.	1.6	13
88	Multi-objective optimisation for musculoskeletal modelling: Application to a planar elbow model. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2014, 228, 1108-1113.	1.8	5
89	A qualitative analysis of soft tissue artefact during running. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 124-125.	1.6	7
90	An upper limb model proposal for multi-body optimisation: effects of anatomical constraints on the kinematics. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 90-91.	1.6	0

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91	Benefits of functional calibration for estimating elbow joint angles using magneto-inertial sensors: preliminary results. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 108-109.	1.6	10
92	Influence of racket on the variability of humerothoracic joint kinematics during tennis serve: a preliminary study. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 152-153.	1.6	1
93	Introduction of a set of EMG-based muscular activations in a multi-objective optimisation when solving the muscular redundancy problem during gait. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 132-133.	1.6	1
94	Generalized mathematical representation of the soft tissue artefact. Journal of Biomechanics, 2014, 47, 476-481.	2.1	33
95	A soft tissue artefact model driven by proximal and distal joint kinematics. Journal of Biomechanics, 2014, 47, 2354-2361.	2.1	40
96	A 3D lower limb musculoskeletal model for simultaneous estimation of musculo-tendon, joint contact, ligament and bone forces during gait. Journal of Biomechanics, 2014, 47, 50-58.	2.1	61
97	Effects of the Racket Polar Moment of Inertia on Dominant Upper Limb Joint Moments during Tennis Serve. PLoS ONE, 2014, 9, e104785.	2.5	18
98	Effect of the muscle activation level distribution on normal stress field: a numerical study. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 164-166.	1.6	2
99	Effect of postural changes on 3D joint angular velocity during starting block phase. Journal of Sports Sciences, 2013, 31, 256-263.	2.0	19
100	Biomechanical maturation of joint dynamics during early childhood: Updated conclusions. Journal of Biomechanics, 2013, 46, 2258-2263.	2.1	17
101	HypothÃ¨se physiopathologique de lâ€™excentration de hanche dans la paralysie cÃ©rÃ©brale Ã partir dâ€™une expÃ©rience de terrain. Motricite Cerebrale, 2013, 34, 123-127.	0.0	2
102	A New Optimization Criterion Introducing the Muscle Stretch Velocity in the Muscular Redundancy Problem: A First Step into the Modeling of Spastic Muscle. Cognitive Systems Monographs, 2013, , 155-164.	0.1	0
103	Influence of hand-held racket on scapulothoracic kinematics during humeral elevation in the scapular plane in young tennis players: a preliminary study. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 102-103.	1.6	0
104	Is there a predominant influence between heel height, upper height and sole stiffness on young children gait dynamics?. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 66-67.	1.6	3
105	Simultaneous Prediction of Musculo-Tendon, Joint Contact, Ligament and Bone Forces in the Lower Limb During Gait Using a One-Step Static Optimisation Procedure. , 2013, , .		0
106	Global sensitivity analysis of the kinematics obtained with a multi-body optimisation using a parallel mechanism of the shoulder. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 61-62.	1.6	10
107	Influence of heel height, upper height and sole stiffness on shod walking in young children. Footwear Science, 2013, 5, S69-S70.	2.1	0
108	Influence of racket polar moment on joint loads during tennis forehand drive. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 99-101.	1.6	7

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109	EMG-based validation of musculo-skeletal models for gait analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 152-154.	1.6	15
110	Joint Kinetics to Assess the Influence of the Racket on a Tennis Player's Shoulder. Journal of Sports Science and Medicine, 2013, 12, 259-66.	1.6	10
111	Potential of the Pseudo-Inverse Method as a Constrained Static Optimization for Musculo-Tendon Forces Prediction. Journal of Biomechanical Engineering, 2012, 134, 064503.	1.3	2
112	Multi-body optimisation with deformable ligament constraints: influence of ligament geometry. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 191-193.	1.6	7
113	Feasibility of incorporating a soft tissue artefact model in multi-body optimisation. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 194-196.	1.6	8
114	Geometrical personalisation of human FE model using palpable markers on volunteers. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 298-300.	1.6	3
115	3D Kinematic of Bunched, Medium and Elongated Sprint Start. International Journal of Sports Medicine, 2012, 33, 555-560.	1.7	24
116	Computation of the mechanical power of a manual wheelchair user in actual conditions: preliminary results. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 173-174.	1.6	3
117	Influence of joint models on lower-limb musculo-tendon forces and three-dimensional joint reaction forces during gait. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2012, 226, 146-160.	1.8	37
118	Joint and segment coordinate systems revisited. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 183-185.	1.6	15
119	Determination of the number of degrees of freedom of the trapeziometacarpal jointâ€"An in vitro study. Irbm, 2012, 33, 272-277.	5.6	7
120	Sagittal spine posture assessment: Feasibility of a protocol based on intersegmental moments. Orthopaedics and Traumatology: Surgery and Research, 2012, 98, 109-113.	2.0	16
121	Analyse de posture sagittale du rachisÂ: Ã©tude de faisabilitÃ© dâ€™un protocole fondÃ© sur les moments intersegmentaires. Revue De Chirurgie Orthopedique Et Traumatologique, 2012, 98, 104-109.	0.0	0
122	Effet du chaussage sur la marche du jeune enfant avec lâ€™augmentation de la vitesse de dÃ©placement. Movement and Sports Sciences - Science Et Motricite, 2012, , 97-105.	0.3	3
123	Anatomical kinematic constraints: consequences on musculo-tendon forces and joint reactions. Multibody System Dynamics, 2012, 28, 125-141.	2.7	28
124	Effect of axis alignment on<i>in vivo</i>shoulder kinematics. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 755-761.	1.6	9
125	Introduction of Contact Forces Minimization in the Musculo-Tendon Forces Optimization During Gait. , 2011, , .		0
126	Foot mechanics during the first six years of independent walking. Journal of Biomechanics, 2011, 44, 1321-1327.	2.1	26

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127	Dynamic input to determine hip joint moments, power and work on the prosthetic limb of transfemoral amputees. Prosthetics and Orthotics International, 2011, 35, 140-149.	1.0	41
128	What is the number of independent degrees of freedom of the trapeziometacarpal joint? Preliminaryin vitroresults. Computer Methods in Biomechanics and Biomedical Engineering, 2011, 14, 17-18.	1.6	6
129	Kinematic and Kinetic Comparisons of Elite and Well-Trained Sprinters During Sprint Start. Journal of Strength and Conditioning Research, 2010, 24, 896-905.	2.1	102
130	Segment-interaction in sprint start: Analysis of 3D angular velocity and kinetic energy in elite sprinters. Journal of Biomechanics, 2010, 43, 1494-1502.	2.1	53
131	Influence of joint constraints on lower limb kinematics estimation from skin markers using global optimization. Journal of Biomechanics, 2010, 43, 2858-2862.	2.1	98
132	Morphometric analysis of vertebral deformities in a porcine scoliosis model. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 41-42.	1.6	0
133	Prediction of internal spine configuration from external measurements using a multi-body model of the spine. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 79-80.	1.6	3
134	Upper limb joint dynamics during manual wheelchair propulsion. Clinical Biomechanics, 2010, 25, 299-306.	1.2	38
135	Expression of Joint Moment in the Joint Coordinate System. Journal of Biomechanical Engineering, 2010, 132, 114503.	1.3	39
136	Upper limb joint moments during wheelchair obstacle climbing. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 99-100.	1.6	4
137	Correction for patient sway in radiographic biplanar imaging for three-dimensional reconstruction of the spine: in vitro study of a new method. Acta Radiologica, 2009, 50, 781-790.	1.1	8
138	Soft tissue artifact compensation by linear 3D interpolation and approximation methods. Journal of Biomechanics, 2009, 42, 2214-2217.	2.1	37
139	Comparison of global and joint-to-joint methods for estimating the hip joint load and the muscle forces during walking. Journal of Biomechanics, 2009, 42, 2357-2362.	2.1	41
140	3D joint dynamics analysis of healthy children's gait. Journal of Biomechanics, 2009, 42, 2447-2453.	2.1	22
141	Loading applied on prosthetic knee of transfemoral amputee: Comparison of inverse dynamics and direct measurements. Gait and Posture, 2009, 30, 560-562.	1.4	70
142	Load during prosthetic gait: Is direct measurement better than inverse dynamics?. Gait and Posture, 2009, 30, S86-S87.	1.4	5
143	A joint coordinate system proposal for the study of the trapeziometacarpal joint kinematics. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 277-282.	1.6	22
144	Soft tissue artefacts: compensation and modelling. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 103-104.	1.6	3

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145	A constraint-based approach to model the lower limb: preliminary results for running motions. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 105-106.	1.6	1
146	Respective contributions of the subject and the wheelchair to the total kinetic energy of manual wheelchair locomotion. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 227-228.	1.6	6
147	MÃ©thodes biomÃ©caniques avancÃ©es pour le calcul des moments articulaires et des forces musculaires. Irbm, 2008, 29, 272-277.	5.6	2
148	A semi-automated method using interpolation and optimisation for the 3D reconstruction of the spine from bi-planar radiography: a precision and accuracy study. Medical and Biological Engineering and Computing, 2008, 46, 85-92.	2.8	48
149	Hip and knee joints are more stabilized than driven during the stance phase of gait: An analysis of the 3D angle between joint moment and joint angular velocity. Gait and Posture, 2008, 28, 243-250.	1.4	26
150	Static optimization of muscle forces during the stance phase of the normal gait including the physiological properties of muscle in the objective function. Computer Methods in Biomechanics and Biomedical Engineering, 2007, 10, 59-60.	1.6	1
151	Influence of the 3D Inverse Dynamic Method on the Joint Forces and Moments During Gait. Journal of Biomechanical Engineering, 2007, 129, 786-790.	1.3	22
152	Adjustments to McConville et al. and Young et al. body segment inertial parameters. Journal of Biomechanics, 2007, 40, 543-553.	2.1	409
153	3D inverse dynamics in non-orthonormal segment coordinate system. Medical and Biological Engineering and Computing, 2007, 45, 315-322.	2.8	43
154	Validation of net joint loads calculated by inverse dynamics in case of complex movements: Application to balance recovery movements. Journal of Biomechanics, 2007, 40, 2450-2456.	2.1	28
155	Comparison of Bi-planar Radiography and Adjusted Scaling Equations for the Computation of Appropriate 3D Body Segment Inertial Parameters. , 2006, , .		1
156	Three-Dimensional Spinal and Pelvic Alignment in an Asymptomatic Population. Spine, 2006, 31, E507-E512.	2.0	44
157	Personalized Body Segment Parameters From Biplanar Low-Dose Radiography. IEEE Transactions on Biomedical Engineering, 2005, 52, 1756-1763.	4.2	49
158	Finite element simulation of spinal deformities correction byin situcontouring technique. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 331-337.	1.6	20
159	Comparison of four 3D inverse dynamic methods for gait analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 89-90.	1.6	1
160	Validation of the relative 3D orientation of vertebrae reconstructed by bi-planar radiography. Medical Engineering and Physics, 2004, 26, 415-422.	1.7	29
161	A 3D Generic Inverse Dynamic Method using Wrench Notation and Quaternion Algebra. Computer Methods in Biomechanics and Biomedical Engineering, 2004, 7, 159-166.	1.6	95
162	Surgical Correction of Scoliosis by In Situ Contouring. Spine, 2004, 29, 193-199.	2.0	120

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163	Variability of the spine and pelvis location with respect to the gravity line: a three-dimensional stereoradiographic study using a force platform. Surgical and Radiologic Anatomy, 2003, 25, 424-433.	1.2	106
164	Explicit calibration method and specific device designed for stereoradiography. Journal of Biomechanics, 2003, 36, 827-834.	2.1	31
165	Title is missing!. Spine, 2003, 28, 1158-1162.	2.0	7
166	Three-Dimensional Quantitative Segmental Analysis of Scoliosis Corrected by the In Situ Contouring Technique. Spine, 2003, 28, 1158-1162.	2.0	23
167	Pre and post 3D modeling of scoliotic patients operated with in situ contouring technique. Studies in Health Technology and Informatics, 2002, 91, 291-5.	0.3	1
168	Mechanical characterization in shear of human femoral cancellous bone: torsion and shear tests. Medical Engineering and Physics, 1999, 21, 641-649.	1.7	40