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	Adjustments to McConville et al. and Young et al. body segment inertial parameters. Journal of Biomechanics, 2007, 40, 543-553.	2.1	409
2	Surgical Correction of Scoliosis by In Situ Contouring. Spine, 2004, 29, 193-199.	2.0	120
3	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
4	ISB recommendations on the reporting of intersegmental forces and moments during human motion analysis. Journal of Biomechanics, 2020, 99, 109533.	2.1	104
5	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
6	Upper Limb Kinematics Using Inertial and Magnetic Sensors: Comparison of Sensor-to-Segment Calibrations. Sensors, 2015, 15, 18813-18833.	3.8	101
7	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
8	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
9	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
10	Human movement analysis: The soft tissue artefact issue. Journal of Biomechanics, 2017, 62, 1-4.	2.1	67
11	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
12	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
13	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
14	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
15	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
16	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
17	Personalized Body Segment Parameters From Biplanar Low-Dose Radiography. IEEE Transactions on Biomedical Engineering, 2005, 52, 1756-1763.	4.2	49
18	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

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19	Three-Dimensional Spinal and Pelvic Alignment in an Asymptomatic Population. Spine, 2006, 31, E507-E512.	2.0	44
20	3D inverse dynamics in non-orthonormal segment coordinate system. Medical and Biological Engineering and Computing, 2007, 45, 315-322.	2.8	43
21	Validation of a multi-body optimization with knee kinematic models including ligament constraints. Journal of Biomechanics, 2015, 48, 1141-1146.	2.1	42
22	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
23	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
24	Mechanical characterization in shear of human femoral cancellous bone: torsion and shear tests. Medical Engineering and Physics, 1999, 21, 641-649.	1.7	40
25	A soft tissue artefact model driven by proximal and distal joint kinematics. Journal of Biomechanics, 2014, 47, 2354-2361.	2.1	40
26	Expression of Joint Moment in the Joint Coordinate System. Journal of Biomechanical Engineering, 2010, 132, 114503.	1.3	39
27	Upper limb joint dynamics during manual wheelchair propulsion. Clinical Biomechanics, 2010, 25, 299-306.	1.2	38
28	Soft tissue artifact compensation by linear 3D interpolation and approximation methods. Journal of Biomechanics, 2009, 42, 2214-2217.	2.1	37
29	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
30	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
31	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
32	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
33	Generalized mathematical representation of the soft tissue artefact. Journal of Biomechanics, 2014, 47, 476-481.	2.1	33
34	Explicit calibration method and specific device designed for stereoradiography. Journal of Biomechanics, 2003, 36, 827-834.	2.1	31
35	A model of the soft tissue artefact rigid component. Journal of Biomechanics, 2015, 48, 1752-1759.	2.1	30
36	Validation of the relative 3D orientation of vertebrae reconstructed by bi-planar radiography. Medical Engineering and Physics, 2004, 26, 415-422.	1.7	29

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37	Gait parameters database for young children: The influences of age and walking speed. Clinical Biomechanics, 2015, 30, 572-577.	1.2	29
38	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
39	Anatomical kinematic constraints: consequences on musculo-tendon forces and joint reactions. Multibody System Dynamics, 2012, 28, 125-141.	2.7	28
40	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
41	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
42	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
43	Foot mechanics during the first six years of independent walking. Journal of Biomechanics, 2011, 44, 1321-1327.	2.1	26
44	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
45	What Portion of the Soft Tissue Artefact Requires Compensation When Estimating Joint Kinematics?. Journal of Biomechanical Engineering, 2015, 137, 064502.	1.3	25
46	3D Kinematic of Bunched, Medium and Elongated Sprint Start. International Journal of Sports Medicine, 2012, 33, 555-560.	1.7	24
47	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
48	Three-Dimensional Quantitative Segmental Analysis of Scoliosis Corrected by the In Situ Contouring Technique. Spine, 2003, 28, 1158-1162.	2.0	23
49	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
50	3D joint dynamics analysis of healthy children's gait. Journal of Biomechanics, 2009, 42, 2447-2453.	2.1	22
51	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
52	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
53	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
54	Knee Kinematics Estimation Using Multi-Body Optimisation Embedding a Knee Joint Stiffness Matrix: A Feasibility Study. PLoS ONE, 2016, 11, e0157010.	2.5	21

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55	Finite element simulation of spinal deformities correction byin situcontouring technique. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 331-337.	1.6	20
56	Effect of postural changes on 3D joint angular velocity during starting block phase. Journal of Sports Sciences, 2013, 31, 256-263.	2.0	19
57	A parallel mechanism of the shoulderâ€"application to multi-body optimisation. Multibody System Dynamics, 2015, 33, 439-451.	2.7	19
58	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
59	How Does the Scapula Move during the Tennis Serve?. Medicine and Science in Sports and Exercise, 2015, 47, 1444-1449.	0.4	18
60	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
61	Biomechanical maturation of joint dynamics during early childhood: Updated conclusions. Journal of Biomechanics, 2013, 46, 2258-2263.	2.1	17
62	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
63	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
64	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
65	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
66	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
67	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
68	Joint and segment coordinate systems revisited. Computer Methods in Biomechanics and Biomedical Engineering, 2012, 15, 183-185.	1.6	15
69	EMG-based validation of musculo-skeletal models for gait analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2013, 16, 152-154.	1.6	15
70	Influence of the Level of Muscular Redundancy on the Validity of a Musculoskeletal Model. Journal of Biomechanical Engineering, 2016, 138, 021019.	1.3	15
71	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
72	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

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73	Scapulothoracic kinematics during tennis forehand drive. Sports Biomechanics, 2014, 13, 166-175.	1.6	13
74	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
75	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
76	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
77	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
78	Glenohumeral contact force during flat and topspin tennis forehand drives. Sports Biomechanics, 2017, 16, 127-142.	1.6	12
79	A multi-body optimization framework with a knee kinematic model including articular contacts and ligaments. Meccanica, 2017, 52, 695-711.	2.0	12
80	Estimation of the Body Segment Inertial Parameters for the Rigid Body Biomechanical Models Used in Motion Analysis. , 2018, , 47-77.		12
81	A constrained Extended Kalman Filter for dynamically consistent inverse kinematics and inertial parameters identification. , 2016, , .		11
82	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
83	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
84	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
85	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
86	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
87	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
88	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
89	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
90	Estimation of the Body Segment Inertial Parameters for the Rigid Body Biomechanical Models Used in Motion Analysis. , 2017, , 1-31.		9

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91	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
92	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
93	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
94	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
95	Physically Consistent Whole-Body Kinematics Assessment Based on an RGB-D Sensor. Application to Simple Rehabilitation Exercises. Sensors, 2020, 20, 2848.	3.8	8
96	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
97	Title is missing!. Spine, 2003, 28, 1158-1162.	2.0	7
98	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
99	Determination of the number of degrees of freedom of the trapeziometacarpal jointâ€"An in vitro study. Irbm, 2012, 33, 272-277.	5.6	7
100	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
101	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
102	A qualitative analysis of soft tissue artefact during running. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 124-125.	1.6	7
103	Can a reduction approach predict reliable joint contact and musculo-tendon forces?. Journal of Biomechanics, 2019, 95, 109329.	2.1	7
104	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
105	Intrinsic foot joints adapt a stabilizedâ€resistive configuration during the stance phase. Journal of Foot and Ankle Research, 2020, 13, 13.	1.9	7
106	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
107	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
108	Load during prosthetic gait: Is direct measurement better than inverse dynamics?. Gait and Posture, 2009, 30, S86-S87.	1.4	5

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109	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
110	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
111	Modeling of the Thigh. , 2017, , 497-521.		5
112	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
113	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
114	Contribution of passive moments to inter-segmental moments during gait: A systematic review. Journal of Biomechanics, 2021, 122, 110450.	2.1	5
115	Upper limb joint moments during wheelchair obstacle climbing. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 99-100.	1.6	4
116	Modeling the Human Tibiofemoral Joint Using Ex Vivo Determined Compliance Matrices. Journal of Biomechanical Engineering, 2016, 138, 061010.	1.3	4
117	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
118	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
119	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
120	Correcting lower limb segment axis misalignment in gait analysis: A simple geometrical method. Gait and Posture, 2019, 72, 34-39.	1.4	4
121	The effect of anterolateral ligament reconstruction on knee constraint: A computer model-based simulation study. Knee, 2020, 27, 1228-1237.	1.6	4
122	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
123	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
124	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
125	Soft tissue artefacts: compensation and modelling. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 103-104.	1.6	3
126	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

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127	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
128	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
129	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
130	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
131	Dynamically consistent inverse kinematics framework using optimizations for human motion analysis. , 2016, , .		3
132	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
133	MÃ©thodes biomÃ©caniques avancÃ©es pour le calcul des moments articulaires et des forces musculaires. Irbm, 2008, 29, 272-277.	5.6	2
134	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
135	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
136	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
137	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
138	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
139	Multibody Optimisations: From Kinematic Constraints to Knee Contact Forces and Ligament Forces. Springer Tracts in Advanced Robotics, 2019, , 65-89.	0.4	2
140	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
141	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
142	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
143	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
144	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

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145	Comparison of four 3D inverse dynamic methods for gait analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 89-90.	1.6	1
146	Comparison of Bi-planar Radiography and Adjusted Scaling Equations for the Computation of Appropriate 3D Body Segment Inertial Parameters. , 2006, , .		1
147	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
148	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
149	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
150	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
151	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
152	Motion analysis and modeling of the shoulder. , 2019, , 261-271.		1
153	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
154	Changes in ankle and foot kinematic after fixed-bearing total ankle replacement. Journal of Biomechanics, 2022, 136, 111060.	2.1	1
155	Morphometric analysis of vertebral deformities in a porcine scoliosis model. Computer Methods in Biomechanics and Biomedical Engineering, 2010, 13, 41-42.	1.6	0
156	Introduction of Contact Forces Minimization in the Musculo-Tendon Forces Optimization During Gait. , 2011, , .		0
157	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
158	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
159	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
160	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
161	Influence of heel height, upper height and sole stiffness on shod walking in young children. Footwear Science, 2013, 5, S69-S70.	2.1	0
162	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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163	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
164	A method for quantitative evaluation of a valgus knee orthosis using biplane x-ray images. , 2020, 2020, 4815-4818.		0
165	The contribution of passive moments to inter-segmental moments during gait: a systematic review. Gait and Posture, 2020, 81, 194-195.	1.4	0
166	Sensitivity of conventional gait model to lower limb marker misplacement. Gait and Posture, 2020, 81, 101-102.	1.4	0
167	Dynamics Assessment and Minimal Model of an Orthosis-Assisted Knee Motion. , 2020, , .		0
168	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