

Ilse Jonkers

List of Publications by Year in descending order

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228
papers

7,840
citations

46636

47
h-index

83414

72
g-index

258
all docs

258
docs citations

258
times ranked

8506
citing authors

#	ARTICLE	IF	CITATIONS
1	WHOLE BLOOD SEROTONIN IN AUTISTIC AND NORMAL SUBJECTS. <i>Journal of Child Psychology and Psychiatry and Allied Disciplines</i> , 1987, 28, 885-900.	6.2	297
2	Quantitative Gait Analysis in Parkinson's Disease: Comparison With a Healthy Control Group. <i>Archives of Physical Medicine and Rehabilitation</i> , 2005, 86, 1007-1013.	1.0	278
3	Catalytic Asymmetric Strecker Synthesis. Preparation of Enantiomerically Pure α -Amino Acid Derivatives from Aldimines and Tributyltin Cyanide or Achiral Aldehydes, Amines, and Hydrogen Cyanide Using a Chiral Zirconium Catalyst. <i>Journal of the American Chemical Society</i> , 2000, 122, 762-766.	14.6	211
4	Capacity to increase walking speed is limited by impaired hip and ankle power generation in lower functioning persons post-stroke. <i>Gait and Posture</i> , 2009, 29, 129-137.	1.6	185
5	pH Effects on the Selectivity of the Electrocatalytic CO ₂ Reduction on Graphene-Embedded Fe-N-C Motifs: Bridging Concepts between Molecular Homogeneous and Solid-State Heterogeneous Catalysis. <i>ACS Energy Letters</i> , 2018, 3, 812-817.	18.4	177
6	Rapid predictive simulations with complex musculoskeletal models suggest that diverse healthy and pathological human gaits can emerge from similar control strategies. <i>Journal of the Royal Society Interface</i> , 2019, 16, 20190402.	3.4	176
7	Global sequence variation in the histidine-rich proteins 2 and 3 of <i>Plasmodium falciparum</i> : implications for the performance of malaria rapid diagnostic tests. <i>Malaria Journal</i> , 2010, 9, 129.	2.2	142
8	Evaluation of the effect of backpack load and position during standing and walking using biomechanical, physiological and subjective measures. <i>Ergonomics</i> , 2007, 50, 728-742.	2.2	133
9	A randomized study of combined botulinum toxin type A and casting in the ambulant child with cerebral palsy using objective outcome measures. <i>European Journal of Neurology</i> , 2001, 8, 75-87.	3.6	132
10	Kalman smoothing improves the estimation of joint kinematics and kinetics in marker-based human gait analysis. <i>Journal of Biomechanics</i> , 2008, 41, 3390-3398.	2.1	120
11	Personalized MR-based musculoskeletal models compared to rescaled generic models in the presence of increased femoral anteversion: Effect on hip moment arm lengths. <i>Gait and Posture</i> , 2008, 28, 358-365.	1.6	117
12	Measuring only hop distance during single leg hop testing is insufficient to detect deficits in knee function after ACL reconstruction: a systematic review and meta-analysis. <i>British Journal of Sports Medicine</i> , 2020, 54, 139-153.	8.6	103
13	Subject-specific hip geometry and hip joint centre location affects calculated contact forces at the hip during gait. <i>Journal of Biomechanics</i> , 2009, 42, 1246-1251.	2.1	98
14	Sensitivity of dynamic simulations of gait and dynamometer experiments to hill muscle model parameters of knee flexors and extensors. <i>Journal of Biomechanics</i> , 2010, 43, 1876-1883.	2.1	98
15	Calculated moment-arm and muscle-tendon lengths during gait differ substantially using MR based versus rescaled generic lower-limb musculoskeletal models. <i>Gait and Posture</i> , 2008, 28, 640-648.	1.6	95
16	Study of the defect elimination mechanisms in aspect ratio trapping Ge growth. <i>Applied Physics Letters</i> , 2007, 90, 101902.	3.2	86
17	The complementary role of the plantarflexors, hamstrings and gluteus maximus in the control of stance limb stability during gait. <i>Gait and Posture</i> , 2003, 17, 264-272.	1.6	85
18	Loading of Hip Measured by Hip Contact Forces at Different Speeds of Walking and Running. <i>Journal of Bone and Mineral Research</i> , 2015, 30, 1431-1440.	3.0	83

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19	Relation between subject-specific hip joint loading, stress distribution in the proximal femur and bone mineral density changes after total hip replacement. <i>Journal of Biomechanics</i> , 2008, 41, 3405-3413.	2.1	82
20	The Contribution of Step Characteristics to Sprint Running Performance in High-Level Male and Female Athletes. <i>Journal of Strength and Conditioning Research</i> , 2013, 27, 116-124.	2.0	81
21	In vivo evaluation of a vibration analysis technique for the per-operative monitoring of the fixation of hip prostheses. <i>Journal of Orthopaedic Surgery and Research</i> , 2009, 4, 10.	2.4	80
22	The flexion synergy, mother of all synergies and father of new models of gait. <i>Frontiers in Computational Neuroscience</i> , 2013, 7, 14.	2.2	76
23	Knee Joint Loading in Healthy Adults During Functional Exercises: Implications for Rehabilitation Guidelines. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2018, 48, 162-173.	3.7	76
24	A musculoskeletal model customized for squatting task. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2019, 22, 21-24.	1.7	75
25	From block clearance to sprint running: Characteristics underlying an effective transition. <i>Journal of Sports Sciences</i> , 2013, 31, 137-149.	2.0	71
26	Characterisation of walking loads by 3D inertial motion tracking. <i>Journal of Sound and Vibration</i> , 2014, 333, 5212-5226.	4.1	71
27	Single leg vertical jump performance identifies knee function deficits at return to sport after ACL reconstruction in male athletes. <i>British Journal of Sports Medicine</i> , 2022, 56, 490-498.	8.6	71
28	Visual deprivation leads to gait adaptations that are age- and context-specific: II. Kinematic parameters. <i>Gait and Posture</i> , 2009, 30, 307-311.	1.6	70
29	Influence of weak hip abductor muscles on joint contact forces during normal walking: probabilistic modeling analysis. <i>Journal of Biomechanics</i> , 2013, 46, 2186-2193.	2.1	70
30	Task constraints and minimization of muscle effort result in a small number of muscle synergies during gait. <i>Frontiers in Computational Neuroscience</i> , 2014, 8, 115.	2.2	66
31	Level of subject-specific detail in musculoskeletal models affects hip moment arm length calculation during gait in pediatric subjects with increased femoral anteversion. <i>Journal of Biomechanics</i> , 2011, 44, 1346-1353.	2.1	65
32	Gait alterations to effectively reduce hip contact forces. <i>Journal of Orthopaedic Research</i> , 2015, 33, 1094-1102.	2.4	65
33	A physiology based inverse dynamic analysis of human gait: potential and perspectives. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2009, 12, 563-574.	1.7	64
34	CD26/DPP-4 inhibition recruits regenerative stem cells via stromal cell-derived factor-1 and beneficially influences ischaemia-reperfusion injury in mouse lung transplantation. <i>European Journal of Cardio-thoracic Surgery</i> , 2012, 41, 1166-1173.	1.4	64
35	Botulinum toxin type A treatment of cerebral palsy: an integrated approach. <i>European Journal of Neurology</i> , 1999, 6, s51.	3.6	62
36	Knee contact forces are not altered in early knee osteoarthritis. <i>Gait and Posture</i> , 2016, 45, 115-120.	1.6	62

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37	Calculating gait kinematics using MR-based kinematic models. <i>Gait and Posture</i> , 2011, 33, 158-164.	1.6	60
38	EMG-Driven Optimal Estimation of Subject-SPECIFIC Hill Model Muscle-Tendon Parameters of the Knee Joint Actuators. <i>IEEE Transactions on Biomedical Engineering</i> , 2017, 64, 2253-2262.	4.4	60
39	Atlas-based non-rigid image registration to automatically define line-of-action muscle models: A validation study. <i>Journal of Biomechanics</i> , 2009, 42, 565-572.	2.1	59
40	Gait characteristics and lower limb muscle strength in women with early and established knee osteoarthritis. <i>Clinical Biomechanics</i> , 2013, 28, 40-47.	1.3	59
41	Subject-Exoskeleton Contact Model Calibration Leads to Accurate Interaction Force Predictions. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2019, 27, 1597-1605.	5.0	59
42	Single leg hop for distance symmetry masks lower limb biomechanics: time to discuss hop distance as decision criterion for return to sport after ACL reconstruction?. <i>British Journal of Sports Medicine</i> , 2022, 56, 249-256.	8.6	59
43	Single event multilevel botulinum toxin type A treatment and surgery: similarities and differences. <i>European Journal of Neurology</i> , 2001, 8, 88-97.	3.6	57
44	A spasticity model based on feedback from muscle force explains muscle activity during passive stretches and gait in children with cerebral palsy. <i>PLoS ONE</i> , 2018, 13, e0208811.	2.5	57
45	Test-Retest Reliability of Innovated Strength Tests for Hip Muscles. <i>PLoS ONE</i> , 2013, 8, e81149.	2.5	56
46	Model-based control for exoskeletons with series elastic actuators evaluated on sit-to-stand movements. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2019, 16, 65.	4.8	54
47	Hip movement pathomechanics of patients with hip osteoarthritis aim at reducing hip joint loading on the osteoarthritic side. <i>Gait and Posture</i> , 2018, 59, 11-17.	1.6	53
48	Arm swing in human walking: What is their drive?. <i>Gait and Posture</i> , 2014, 40, 321-326.	1.6	51
49	Effects of TGF- β 2 and glucocorticoids on map kinase phosphorylation, IL-6/IL-11 secretion and cell proliferation in primary cultures of human lung fibroblasts. <i>Journal of Cellular Physiology</i> , 2007, 210, 489-497.	4.2	50
50	Control of angular momentum during walking in children with cerebral palsy. <i>Research in Developmental Disabilities</i> , 2011, 32, 2860-2866.	2.3	49
51	SimCP: A Simulation Platform to Predict Gait Performance Following Orthopedic Intervention in Children With Cerebral Palsy. <i>Frontiers in Neurorobotics</i> , 2019, 13, 54.	2.9	49
52	Physics-Based Simulations to Predict the Differential Effects of Motor Control and Musculoskeletal Deficits on Gait Dysfunction in Cerebral Palsy: A Retrospective Case Study. <i>Frontiers in Human Neuroscience</i> , 2020, 14, 40.	2.1	49
53	Proprioceptive accuracy in women with early and established knee osteoarthritis and its relation to functional ability, postural control, and muscle strength. <i>Clinical Rheumatology</i> , 2013, 32, 1365-1374.	2.3	48
54	Muscle optimization techniques impact the magnitude of calculated hip joint contact forces. <i>Journal of Orthopaedic Research</i> , 2015, 33, 430-438.	2.4	48

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55	Hip contact force in presence of aberrant bone geometry during normal and pathological gait. <i>Journal of Orthopaedic Research</i> , 2014, 32, 1406-1415.	2.4	47
56	Virtual reality balance training for elderly: Similar skiing games elicit different challenges in balance training. <i>Gait and Posture</i> , 2018, 59, 111-116.	1.6	47
57	A multi-scale modelling framework combining musculoskeletal rigid-body simulations with adaptive finite element analyses, to evaluate the impact of femoral geometry on hip joint contact forces and femoral bone growth. <i>PLoS ONE</i> , 2020, 15, e0235966.	2.5	47
58	Knee Cartilage Thickness, T1 ρ and T2 Relaxation Time Are Related to Articular Cartilage Loading in Healthy Adults. <i>PLoS ONE</i> , 2017, 12, e0170002.	2.5	47
59	Virtual reconstruction of glenoid bone defects using a statistical shape model. <i>Journal of Shoulder and Elbow Surgery</i> , 2018, 27, 160-166.	2.5	45
60	The study of muscle action during single support and swing phase of gait: clinical relevance of forward simulation techniques. <i>Gait and Posture</i> , 2003, 17, 97-105.	1.6	44
61	Similar muscles contribute to horizontal and vertical acceleration of center of mass in forward and backward walking: implications for neural control. <i>Journal of Neurophysiology</i> , 2012, 107, 3385-3396.	1.9	44
62	Gait stability in children with Cerebral Palsy. <i>Research in Developmental Disabilities</i> , 2013, 34, 1689-1699.	2.3	44
63	Longitudinal joint loading in patients before and up to one year after unilateral total hip arthroplasty. <i>Gait and Posture</i> , 2018, 61, 117-124.	1.6	44
64	Three-dimensional reaching tasks: Effect of reaching height and width on upper limb kinematics and muscle activity. <i>Gait and Posture</i> , 2010, 32, 500-507.	1.6	43
65	Mechanobiological prediction of proximal femoral deformities in children with cerebral palsy. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2011, 14, 253-262.	1.7	43
66	Medial knee loading is altered in subjects with early osteoarthritis during gait but not during step-up-and-over task. <i>PLoS ONE</i> , 2017, 12, e0187583.	2.5	42
67	Transmission of Whole-Body Vibration and Its Effect on Muscle Activation. <i>Journal of Strength and Conditioning Research</i> , 2013, 27, 2533-2541.	2.0	41
68	Altered talar and navicular bone morphology is associated with pes planus deformity: A CTâ€scan study. <i>Journal of Orthopaedic Research</i> , 2013, 31, 282-287.	2.4	40
69	Generic scaled versus subject-specific models for the calculation of musculoskeletal loading in cerebral palsy gait: Effect of personalized musculoskeletal geometry outweighs the effect of personalized neural control. <i>Clinical Biomechanics</i> , 2021, 87, 105402.	1.3	40
70	A multilevel approach to botulinum toxin type A treatment of the (ilio)psoas in spasticity in cerebral palsy. <i>European Journal of Neurology</i> , 1999, 6, s59-s62.	3.6	39
71	Subject-specific geometrical detail rather than cost function formulation affects hip loading calculation. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 1475-1488.	1.7	39
72	Increased use of stepping strategy in response to medio-lateral perturbations in the elderly relates to altered reactive tibialis anterior activity. <i>Gait and Posture</i> , 2019, 68, 575-582.	1.6	39

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73	A patient-specific guide for optimizing custom-made glenoid implantation in cases of severe glenoid defects: an in vitro study. <i>Journal of Shoulder and Elbow Surgery</i> , 2016, 25, 837-845.	2.5	38
74	Role of subject-specific musculoskeletal loading on the prediction of bone density distribution in the proximal femur. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 30, 244-252.	3.1	37
75	Control of propulsion and body lift during the first two stances of sprint running: a simulation study. <i>Journal of Sports Sciences</i> , 2015, 33, 2016-2024.	2.0	37
76	Musculo-tendon length and lengthening velocity of rectus femoris in stiff knee gait. <i>Gait and Posture</i> , 2006, 23, 222-229.	1.6	36
77	Effect of voluntary activation on age-related muscle fatigue resistance. <i>Journal of Biomechanics</i> , 2008, 41, 1229-1235.	2.1	36
78	The influence of maximum isometric muscle force scaling on estimated muscle forces from musculoskeletal models of children with cerebral palsy. <i>Gait and Posture</i> , 2018, 65, 213-220.	1.6	36
79	Subject-specific musculoskeletal modelling in patients before and after total hip arthroplasty. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 1683-1691.	1.7	35
80	A methodological framework for detecting ulcers risk in diabetic foot subjects by combining gait analysis, a new musculoskeletal foot model and a foot finite element model. <i>Gait and Posture</i> , 2018, 60, 279-285.	1.6	35
81	How gravity and muscle action control mediolateral center of mass excursion during slow walking: A simulation study. <i>Gait and Posture</i> , 2014, 39, 91-97.	1.6	34
82	The influence of knee joint geometry and alignment on the tibiofemoral load distribution: A computational study. <i>Knee</i> , 2019, 26, 813-823.	1.6	34
83	Sensitivity of predicted muscle forces during gait to anatomical variability in musculotendon geometry. <i>Journal of Biomechanics</i> , 2015, 48, 2116-2123.	2.1	33
84	The effect of muscle weakness on the capability gap during gross motor function: a simulation study supporting design criteria for exoskeletons of the lower limb. <i>BioMedical Engineering OnLine</i> , 2014, 13, 111.	2.8	32
85	Altering length and velocity feedback during a neuro-musculoskeletal simulation of normal gait contributes to hemiparetic gait characteristics. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2014, 11, 78.	4.8	32
86	An EMG-based, muscle driven forward simulation of single support phase of gait. <i>Journal of Biomechanics</i> , 2002, 35, 609-619.	2.1	31
87	Extended foot-ankle musculoskeletal models for application in movement analysis. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2017, 20, 153-159.	1.7	31
88	Use of Computational Modeling to Study Joint Degeneration: A Review. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 93.	4.2	31
89	A Machine Learning Approach to Estimate Hip and Knee Joint Loading Using a Mobile Phone-Embedded IMU. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 320.	4.2	31
90	Modulation of gluteus medius activity reflects the potential of the muscle to meet the mechanical demands during perturbed walking. <i>Scientific Reports</i> , 2018, 8, 11675.	3.4	30

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91	Real-Time Gait Event Detection Based on Kinematic Data Coupled to a Biomechanical Model. Sensors, 2017, 17, 671.	4.0	29
92	ANP32A regulates ATM expression and prevents oxidative stress in cartilage, brain, and bone. Science Translational Medicine, 2018, 10, .	13.4	28
93	Ranking of osteogenic potential of physical exercises in postmenopausal women based on femoral neck strains. PLoS ONE, 2018, 13, e0195463.	2.5	28
94	Inverse dynamic estimates of muscle recruitment and joint contact forces are more realistic when minimizing muscle activity rather than metabolic energy or contact forces. Gait and Posture, 2019, 74, 223-230.	1.6	28
95	The effect of perturbing body segment parameters on calculated joint moments and muscle forces during gait. Journal of Biomechanics, 2014, 47, 596-601.	2.1	27
96	An in vitro approach to the evaluation of foot-ankle kinematics: Performance evaluation of a custom-built gait simulator. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2013, 227, 955-967.	1.8	26
97	Quantifying thumb opposition kinematics using dynamic computed tomography. Journal of Biomechanics, 2016, 49, 1994-1999.	2.1	26
98	Symmetry in Triple Hop Distance Hides Asymmetries in Knee Function After ACL Reconstruction in Athletes at Return to Sports. American Journal of Sports Medicine, 2022, 50, 441-450.	4.3	26
99	Performance specification for lower limb orthotic devices. Clinical Biomechanics, 2004, 19, 711-718.	1.3	25
100	Early periprosthetic bone remodelling around cemented and uncemented custom-made femoral components and their uncemented acetabular cups. Archives of Orthopaedic and Trauma Surgery, 2011, 131, 941-948.	2.6	25
101	Mechanical effort predicts the selection of ankle over hip strategies in nonstepping postural responses. Journal of Neurophysiology, 2016, 116, 1937-1945.	1.9	25
102	Successful Preliminary Walking Experiments on a Transtibial Amputee Fitted with a Powered Prosthesis. Prosthetics and Orthotics International, 2009, 33, 368-377.	1.1	24
103	Combined enzymatic degradation of proteoglycans and collagen significantly alters intratissue strains in articular cartilage during cyclic compression. Journal of the Mechanical Behavior of Biomedical Materials, 2019, 98, 383-394.	3.1	24
104	In Silico-Enhanced Treatment and Rehabilitation Planning for Patients with Musculoskeletal Disorders: Can Musculoskeletal Modelling and Dynamic Simulations Really Impact Current Clinical Practice?. Applied Sciences (Switzerland), 2020, 10, 7255.	2.6	24
105	Influence of altered gait patterns on the hip joint contact forces. Computer Methods in Biomechanics and Biomedical Engineering, 2014, 17, 352-359.	1.7	23
106	Comparison of lower limb muscle strength between diabetic neuropathic and healthy subjects using OpenSim. Gait and Posture, 2017, 58, 194-200.	1.6	23
107	Implementation of physiological functional spinal units in a rigid-body model of the thoracolumbar spine. Journal of Biomechanics, 2020, 98, 109437.	2.1	23
108	A new method for estimating subject-specific muscle-tendon parameters of the knee joint actuators: a simulation study. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 969-987.	2.2	22

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109	Musculoskeletal modelling in dogs: challenges and future perspectives. <i>Veterinary and Comparative Orthopaedics and Traumatology</i> , 2016, 29, 181-187.	0.6	22
110	Cartilage-on-cartilage contact: effect of compressive loading on tissue deformations and structural integrity of bovine articular cartilage. <i>Osteoarthritis and Cartilage</i> , 2018, 26, 1699-1709.	1.3	22
111	Musculotendon excursion potential, tendon slack and muscle fibre length: the interaction of the canine gastrocnemius muscle and tendon. <i>Journal of Anatomy</i> , 2018, 233, 460-467.	1.7	22
112	Selective dorsal rhizotomy improves muscle forces during walking in children with spastic cerebral palsy. <i>Clinical Biomechanics</i> , 2019, 65, 26-33.	1.3	22
113	Image Based Musculoskeletal Modeling Allows Personalized Biomechanical Analysis of Gait. <i>Lecture Notes in Computer Science</i> , 2006, , 58-66.	1.0	22
114	The role of altered proximal femoral geometry in impaired pelvis stability and hip control during CP gait: A simulation study. <i>Gait and Posture</i> , 2016, 44, 61-67.	1.6	21
115	Muscular effort in multiple sclerosis patients during powered wheelchair manoeuvres. <i>Clinical Biomechanics</i> , 2004, 19, 929-938.	1.3	20
116	Does surgical approach or prosthesis type affect hip joint loading one year after surgery?. <i>Gait and Posture</i> , 2016, 44, 74-82.	1.6	20
117	Augmented Ligament Reconstruction Partially Restores Hindfoot and Midfoot Kinematics After Lateral Ligament Ruptures. <i>American Journal of Sports Medicine</i> , 2019, 47, 1921-1930.	4.3	20
118	Image based methods to generate subject-specific musculoskeletal models for gait analysis. <i>International Congress Series</i> , 2005, 1281, 62-67.	0.2	19
119	Forefoot deformation during stance: Does the forefoot collapse during loading?. <i>Gait and Posture</i> , 2014, 39, 40-47.	1.6	19
120	Computed tomography-based joint locations affect calculation of joint moments during gait when compared to scaling approaches. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2015, 18, 1238-1251.	1.7	19
121	Automated quantification of glenoid bone defects using 3-dimensional measurements. <i>Journal of Shoulder and Elbow Surgery</i> , 2020, 29, 1050-1058.	2.5	19
122	The Exo4Work shoulder exoskeleton effectively reduces muscle and joint loading during simulated occupational tasks above shoulder height. <i>Applied Ergonomics</i> , 2022, 103, 103800.	3.2	19
123	Functional knee axis based on isokinetic dynamometry data: Comparison of two methods, MRI validation, and effect on knee joint kinematics. <i>Journal of Biomechanics</i> , 2011, 44, 2595-2600.	2.1	18
124	A physiology-based inverse dynamic analysis of human gait using sequential convex programming: a comparative study. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2012, 15, 1093-1102.	1.7	18
125	Virtual Reality Balance Games Provide Little Muscular Challenge to Prevent Muscle Weakness in Healthy Older Adults. <i>Games for Health Journal</i> , 2020, 9, 227-236.	2.3	18
126	Functional MRI can detect changes in intratissue strains in a full thickness and critical sized ovine cartilage defect model. <i>Journal of Biomechanics</i> , 2018, 66, 18-25.	2.1	18

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127	In vitro analysis of muscle activity illustrates mediolateral decoupling of hind and mid foot bone motion. <i>Gait and Posture</i> , 2013, 38, 56-61.	1.6	17
128	Muscle contributions to centre of mass acceleration during turning gait in typically developing children: A simulation study. <i>Journal of Biomechanics</i> , 2015, 48, 4238-4245.	2.1	17
129	Evaluation of predicted knee function for component malrotation in total knee arthroplasty. <i>Medical Engineering and Physics</i> , 2017, 40, 56-64.	1.8	17
130	Increased sensory noise and not muscle weakness explains changes in non-stepping postural responses following stance perturbations in healthy elderly. <i>Gait and Posture</i> , 2018, 59, 122-127.	1.6	17
131	Performance on Balance Evaluation Systems Test (BESTest) Impacts Health-Related Quality of Life in Adult Spinal Deformity Patients. <i>Spine</i> , 2018, 43, 637-646.	2.1	17
132	Dynamic simulation of human motion: numerically efficient inclusion of muscle physiology by convex optimization. <i>Optimization and Engineering</i> , 2008, 9, 213-238.	2.4	16
133	The added value of an actuated ankle-foot orthosis to restore normal gait function in patients with spinal cord injury: A systematic review. <i>Journal of Rehabilitation Medicine</i> , 2012, 44, 299-309.	1.1	16
134	Squat Lifting Imposes Higher Peak Joint and Muscle Loading Compared to Stoop Lifting. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 3794.	2.6	16
135	Topographical Variation of Human Femoral Articular Cartilage Thickness, T1rho and T2 Relaxation Times Is Related to Local Loading during Walking. <i>Cartilage</i> , 2019, 10, 229-237.	2.8	16
136	12 Degrees of Freedom Muscle Force Driven Fibril-Reinforced Poroviscoelastic Finite Element Model of the Knee Joint. <i>IEEE Transactions on Neural Systems and Rehabilitation Engineering</i> , 2021, 29, 123-133.	5.0	16
137	Estimation of hamstring length at initial contact based on kinematic gait data. <i>Gait and Posture</i> , 2004, 20, 61-66.	1.6	15
138	gem-dichloro(alkyl)cyclopropanes in reactions with NOCl-2SO3: Synthesis of alkyl-5-chloroisoxazoles. <i>Russian Chemical Bulletin</i> , 2011, 60, 328-333.	1.7	15
139	Muscle contributions to center of mass acceleration adapt to asymmetric walking in healthy subjects. <i>Gait and Posture</i> , 2013, 38, 739-744.	1.6	14
140	The petrology and chronology of NWA 8009 impact melt breccia: Implication for early thermal and impact histories of Vesta. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 204, 159-178.	3.9	14
141	Development and validation of a modeling workflow for the generation of image-based, subject-specific thoracolumbar models of spinal deformity. <i>Journal of Biomechanics</i> , 2020, 110, 109946.	2.1	14
142	Inertial Sensor-to-Segment Calibration for Accurate 3D Joint Angle Calculation for Use in OpenSim. <i>Sensors</i> , 2022, 22, 3259.	4.0	14
143	Mediated Quality. <i>International Journal of Digital Literacy and Digital Competence</i> , 2013, 4, 56-73.	0.2	13
144	A gluing approach for the fractional Yamabe problem with isolated singularities. <i>Journal Fur Die Reine Und Angewandte Mathematik</i> , 2020, 2020, 25-78.	0.8	13

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145	Hip Muscle Forces and Contact Loading During Squatting After Cam-Type FAI Surgery. <i>Journal of Bone and Joint Surgery - Series A</i> , 2020, 102, 34-42.	3.0	13
146	ESB Clinical Biomechanics Award 2020: Pelvis and hip movement strategies discriminate typical and pathological femoral growth – Insights gained from a multi-scale mechanobiological modelling framework. <i>Clinical Biomechanics</i> , 2021, 87, 105405.	1.3	13
147	Fast model predictive control for the air path of a turbocharged diesel engine. , 2009, , .		12
148	Quantifying individual muscle contribution to three-dimensional reaching tasks. <i>Gait and Posture</i> , 2012, 35, 579-584.	1.6	12
149	Inertial control as novel technique for in vitro gait simulations. <i>Journal of Biomechanics</i> , 2015, 48, 392-395.	2.1	12
150	Less hip joint loading only during running rather than walking in elderly compared to young adults. <i>Gait and Posture</i> , 2017, 53, 155-161.	1.6	12
151	Profiling the Steroidogenic Pathway in Human Fetal and Adult Adrenals. <i>Journal of the Society for Gynecologic Investigation</i> , 2003, 10, 372-380.	1.7	11
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