Antonie J Van Den Bogert

List of Publications by Year
in descending order

188 papers	14,397 citations	26626 56 h-index	20955 115 g-index
200 all docs	200 docs citations	200 times ranked	7470 citing authors

#	Article	IF	Citations
1	Biomechanical Measures of Neuromuscular Control and Valgus Loading of the Knee Predict Anterior Cruciate Ligament Injury Risk in Female Athletes: A Prospective Study. American Journal of Sports Medicine, 2005, 33, 492-501.	4.2	3,022
2	Model-based estimation of muscle forces exerted during movements. Clinical Biomechanics, 2007, 22, 131-154.	1.2	710
3	Effect of skin movement on the analysis of skeletal knee joint motion during running. Journal of Biomechanics, 1997, 30, 729-732.	2.1	388
4	Aggressive Quadriceps Loading Can Induce Noncontact Anterior Cruciate Ligament Injury. American Journal of Sports Medicine, 2004, 32, 477-483.	4.2	363
5	Effect of low pass filtering on joint moments from inverse dynamics: Implications for injury prevention. Journal of Biomechanics, 2012, 45, 666-671.	2.1	363
6	Effect of Gender and Defensive Opponent on the Biomechanics of Sidestep Cutting. Medicine and Science in Sports and Exercise, 2004, 36, 1008-1016.	0.4	346
7	Optimality principles for model-based prediction of human gait. Journal of Biomechanics, 2010, 43, 1055-1060.	2.1	346
8	Sagittal plane biomechanics cannot injure the ACL during sidestep cutting. Clinical Biomechanics, 2004, 19, 828-838.	1.2	328
9	Association between lower extremity posture at contact and peak knee valgus moment during sidestepping: Implications for ACL injury. Clinical Biomechanics, 2005, 20, 863-870.	1.2	324
10	A real-time system for biomechanical analysis of human movement and muscle function. Medical and Biological Engineering and Computing, 2013, 51, 1069-1077.	2.8	299
11	The influence of foot positioning on ankle sprains. Journal of Biomechanics, 2000, 33, 513-519.	2.1	259
12	Direct dynamics simulation of the impact phase in heel-toe running. Journal of Biomechanics, 1995, 28, 661-668.	2.1	256
13	Evaluation of a two dimensional analysis method as a screening and evaluation tool for anterior cruciate ligament injury. British Journal of Sports Medicine, 2005, 39, 355-362.	6.7	232
14	Horses damp the spring in their step. Nature, 2001, 414, 895-899.	27.8	216
15	Longitudinal Sex Differences during Landing in Knee Abduction in Young Athletes. Medicine and Science in Sports and Exercise, 2010, 42, 1923-1931.	0.4	206
16	Tibiofemoral and tibiocalcaneal motion during walking: external vs. skeletal markers. Gait and Posture, 1997, 6, 98-109.	1.4	205
17	Development and Validation of a 3-D Model to Predict Knee Joint Loading During Dynamic Movement. Journal of Biomechanical Engineering, 2003, 125, 864-874.	1.3	199
18	Kinematic Adaptations during Running: Effects of Footwear, Surface, and Duration. Medicine and Science in Sports and Exercise, 2004, 36, 838-844.	0.4	197

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19	Effects of foot orthoses on skeletal motion during running. Clinical Biomechanics, 2000, 15, 54-64.	1.2	194
20	In vivo determination of the anatomical axes of the ankle joint complex: An optimization approach. Journal of Biomechanics, 1994, 27, 1477-1488.	2.1	172
21	Muscle coordination and function during cutting movements. Medicine and Science in Sports and Exercise, 1999, 31, 294-302.	0.4	149
22	Structural Basis for Delivery of the Intact [Fe2S2] Cluster by Monothiol Glutaredoxin. Biochemistry, 2009, 48, 6041-6043.	2.5	146
23	Tibiocalcaneal motion during running, measured with external and bone markers. Clinical Biomechanics, 1997, 12, 8-16.	1.2	145
24	Personal Navigation via High-Resolution Gait-Corrected Inertial Measurement Units. IEEE Transactions on Instrumentation and Measurement, 2010, 59, 3018-3027.	4.7	142
25	Implicit methods for efficient musculoskeletal simulation and optimal control. Procedia IUTAM, 2011, 2, 297-316.	1.2	140
26	Estimation of musculotendon kinematics in large musculoskeletal models using multidimensional B-splines. Journal of Biomechanics, 2012, 45, 595-601.	2.1	130
27	Ground reaction force patterns of Dutch Warmblood horses at normal trot. Equine Veterinary Journal, 1993, 25, 134-137.	1.7	127
28	The influence of orthotic devices and vastus medialis strength and timing on patellofemoral loads during running. Clinical Biomechanics, 2000, 15, 611-618.	1.2	120
29	Tibiocalcaneal kinematics of barefoot versus shod running. Journal of Biomechanics, 2000, 33, 1387-1395.	2.1	118
30	Response time is more important than walking speed for the ability of older adults to avoid a fall after a trip. Journal of Biomechanics, 2002, 35, 199-205.	2.1	118
31	An analysis of hip joint loading during walking, running, and skiing. Medicine and Science in Sports and Exercise, 1999, 31, 131-142.	0.4	117
32	A Method for Numerical Simulation of Single Limb Ground Contact Events: Application to Heel-Toe Running. Computer Methods in Biomechanics and Biomedical Engineering, 2000, 3, 321-334.	1.6	115
33	Effect of gender on lower extremity kinematics during rapid direction changes: An integrated analysis of three sports movements. Journal of Science and Medicine in Sport, 2005, 8, 411-422.	1.3	106
34	Exotendons for assistance of human locomotion. BioMedical Engineering OnLine, 2003, 2, 17.	2.7	104
35	ISB recommendations on the reporting of intersegmental forces and moments during human motion analysis. Journal of Biomechanics, 2020, 99, 109533.	2.1	104
36	Influence of shoeing on ground reaction forces and tendon strains in the forelimbs of ponies. Equine Veterinary Journal, 1996, 28, 126-132.	1.7	89

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37	Effects of shoe sole construction on skeletal motion during running. Medicine and Science in Sports and Exercise, 2001, 33, 311-319.	0.4	87
38	Contributions of proximal and distal moments to axial tibial rotation during walking and running. Journal of Biomechanics, 2000, 33, 1397-1403.	2.1	85
39	A Real-Time, 3-D Musculoskeletal Model for Dynamic Simulation of Arm Movements. IEEE Transactions on Biomedical Engineering, 2009, 56, 941-948.	4.2	83
40	Estimation of gait kinematics and kinetics from inertial sensor data using optimal control of musculoskeletal models. Journal of Biomechanics, 2019, 95, 109278.	2.1	81
41	Passive regulation of impact forces in heel-toe running. Clinical Biomechanics, 1998, 13, 521-531.	1.2	79
42	Investigating isolated neuromuscular control contributions to non-contact anterior cruciate ligament injury risk via computer simulation methods. Clinical Biomechanics, 2008, 23, 926-936.	1.2	78
43	Correction models for skin displacement in equine kinematics gait analysis. Journal of Equine Veterinary Science, 1992, 12, 178-192.	0.9	77
44	How the horse moves: 1. Significance of graphical representations of equine forelimb kinematics. Equine Veterinary Journal, 1995, 27, 31-38.	1.7	76
45	Lower extremity joint loading during impact in running. Clinical Biomechanics, 1996, 11, 181-193.	1.2	76
46	A method for inverse dynamic analysis using accelerometry. Journal of Biomechanics, 1996, 29, 949-954.	2.1	75
47	Computer simulation of landing movement in downhill skiing: Anterior cruciate ligament injuries. Journal of Biomechanics, 1996, 29, 845-854.	2.1	73
48	Human muscle modelling from a user's perspective. Journal of Electromyography and Kinesiology, 1998, 8, 119-124.	1.7	72
49	Tendon strain in the forelimbs as a function of gait and ground characteristics and in vitro limb loading in ponies. Equine Veterinary Journal, 1996, 28, 133-138.	1.7	70
50	An elaborate data set on human gait and the effect of mechanical perturbations. PeerJ, 2015, 3, e918.	2.0	68
51	Concurrent musculoskeletal dynamics and finite element analysis predicts altered gait patterns to reduce foot tissue loading. Journal of Biomechanics, 2010, 43, 2810-2815.	2.1	65
52	Standardization proposal of soft tissue artefact description for data sharing in human motion measurements. Journal of Biomechanics, 2017, 62, 5-13.	2.1	65
53	How the horse moves: 2. Significance of graphical representations of equine hind limb kinematics. Equine Veterinary Journal, 1995, 27, 39-45.	1.7	63
54	On the Number and Placement of Accelerometers for Angular Velocity and Acceleration Determination. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2001, 123, 552-554.	1.6	63

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55	CNN-Based Estimation of Sagittal Plane Walking and Running Biomechanics From Measured and Simulated Inertial Sensor Data. Frontiers in Bioengineering and Biotechnology, 2020, 8, 604.	4.1	62
56	Modelling of force production in skeletal muscle undergoing stretch. Journal of Biomechanics, 1996, 29, 1091-1104.	2.1	61
57	Helical axes of skeletal knee joint motion during running. Journal of Biomechanics, 2008, 41, 1632-1638.	2.1	61
58	Real-Time Simulation of Three-Dimensional Shoulder Girdle and Arm Dynamics. IEEE Transactions on Biomedical Engineering, 2014, 61, 1947-1956.	4.2	58
59	Predictive simulation of gait at low gravity reveals skipping as the preferred locomotion strategy. Journal of Biomechanics, 2012, 45, 1293-1298.	2.1	56
60	Kinematics of the Standardbred Trotter Measured at 6, 7, 8 and 9 m/s on a Treadmill, before and after 5 Months of Prerace Training. Cells Tissues Organs, 1993, 146, 154-161.	2.3	54
61	In vivo Tendon Forces in the Forelimb of Ponies at the Walk, Validated by Ground Reaction Force Measurements. Cells Tissues Organs, 1993, 146, 162-167.	2.3	54
62	Kinematic Gait Analysis in Equine Carpal Lameness. Cells Tissues Organs, 1993, 146, 86-89.	2.3	51
63	Standard mechanical energy analyses do not correlate with muscle work in cycling. Journal of Biomechanics, 1997, 31, 239-245.	2.1	51
64	Metabolic cost calculations of gait using musculoskeletal energy models, a comparison study. PLoS ONE, 2019, 14, e0222037.	2.5	51
65	Simulation of quadrupedal locomotion using a rigid body model. Journal of Biomechanics, 1989, 22, 33-41.	2.1	50
66	Joint contact forces can be reduced by improving joint moment symmetry in below-knee amputee gait simulations. Gait and Posture, 2016, 49, 219-225.	1.4	49
67	The effects of age and skill level on knee musculature co-contraction during functional activities: a systematic review. British Journal of Sports Medicine, 2008, 42, 561-566.	6.7	48
68	Adaptive Surrogate Modeling for Efficient Coupling of Musculoskeletal Control and Tissue Deformation Models. Journal of Biomechanical Engineering, 2009, 131, 011014.	1.3	48
69	Training an Actor-Critic Reinforcement Learning Controller for Arm Movement Using Human-Generated Rewards. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1892-1905.	4.9	48
70	Design and Validation of a General Purpose Robotic Testing System for Musculoskeletal Applications. Journal of Biomechanical Engineering, 2010, 132, 025001.	1.3	47
71	The biomechanical role of scaffolds in augmented rotator cuff tendon repairs. Journal of Shoulder and Elbow Surgery, 2012, 21, 1064-1071.	2.6	45
72	Relationship between jump landing kinematics and peak <scp>ACL</scp> force during a jump in downhill skiing: A simulation study. Scandinavian Journal of Medicine and Science in Sports, 2014, 24, e180-7.	2.9	44

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73	Movement Coupling at the Ankle During the Stance Phase of Running. Foot and Ankle International, 2000, 21, 232-239.	2.3	41
74	Optimization and evaluation of a proportional derivative controller for planar arm movement. Journal of Biomechanics, 2010, 43, 1086-1091.	2.1	41
75	Real-time simulation of hand motion for prosthesis control. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 540-549.	1.6	41
76	Correction for skin displacement errors in movement analysis of the horse. Journal of Biomechanics, 1990, 23, 97-101.	2.1	40
77	Quantification of skin displacement near the carpal, tarsal and fetlock joints of the walking horse. Equine Veterinary Journal, 1988, 20, 203-208.	1.7	38
78	A quantitative analysis of skin displacement in the trotting horse. Equine Veterinary Journal, 1990, 22, 101-109.	1.7	38
79	Model formulation and determination of in vitro parameters of a noninvasive method to calculate flexor tendon forces in the equine forelimb. American Journal of Veterinary Research, 2001, 62, 1585-1593.	0.6	37
80	Kinetics and kinematics of the equine hind limb: in vivo tendon strain and joint kinematics. American Journal of Veterinary Research, 1988, 49, 1353-9.	0.6	37
81	The effect of tibiofemoral loading on proximal tibiofibular joint motion. Journal of Anatomy, 2007, 211, 647-653.	1.5	35
82	Skating technique for the straights, based on the optimization of a simulation model. Medicine and Science in Sports and Exercise, 1997, 29, 279-286.	0.4	34
83	The effects of ankle compliance and flexibility on ankle sprains. Medicine and Science in Sports and Exercise, 2000, 32, 260.	0.4	33
84	Gender dimorphic ACL strain in response to combined dynamic 3D knee joint loading: Implications for ACL injury risk. Knee, 2009, 16, 432-440.	1.6	33
85	OpenSim Versus Human Body Model: A Comparison Study for the Lower Limbs During Gait. Journal of Applied Biomechanics, 2018, 34, 496-502.	0.8	33
86	A metabolic energy expenditure model with a continuous first derivative and its application to predictive simulations of gait. Computer Methods in Biomechanics and Biomedical Engineering, 2018, 21, 521-531.	1.6	33
87	Quantification of the Locomotion of Dutch Warmblood Foals. Cells Tissues Organs, 1993, 146, 141-147.	2.3	32
88	Influence of Ankle Ligaments on Tibial Rotation: An In Vitro Study. Foot and Ankle International, 1996, 17, 79-84.	2.3	30
89	A weighted least squares method for inverse dynamic analysis. Computer Methods in Biomechanics and Biomedical Engineering, 2008, 11, 3-9.	1.6	29
90	Modeling and Optimal Control of an Energy-Storing Prosthetic Knee. Journal of Biomechanical Engineering, 2012, 134, 051007.	1.3	29

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91	Strain of the Musculus interosseus medius and Its Rami extensorii in the Horse, Deduced from in vivo Kinematics. Cells Tissues Organs, 1993, 147, 118-124.	2.3	28
92	Quantitative analysis of computer-averaged electromyographic profiles of intrinsic limb muscles in ponies at the walk. American Journal of Veterinary Research, 1992, 53, 2343-9.	0.6	27
93	Measurement Techniques in Animal Locomotion Analysis. Cells Tissues Organs, 1993, 146, 123-129.	2.3	26
94	Foot and ankle forces during an automobile collision: the influence of muscles. Journal of Biomechanics, 2004, 37, 637-644.	2.1	25
95	Letter to the Editor. American Journal of Sports Medicine, 2005, 33, 1106-1107.	4.2	25
96	Predictive musculoskeletal simulation using optimal control: effects of added limb mass on energy cost and kinematics of walking and running. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2012, 226, 123-133.	0.7	25
97	Expressing the joint moments of drop jumps and sidestep cutting in different reference frames â€" does it matter?. Journal of Biomechanics, 2014, 47, 193-199.	2.1	25
98	A method to determine bone movement in the ankle joint complex in vitro. Journal of Biomechanics, 1997, 30, 513-516.	2.1	23
99	Efficient trajectory optimization for curved running using a 3D musculoskeletal model with implicit dynamics. Scientific Reports, 2020, 10, 17655.	3.3	23
100	Model-Based Control of Individual Finger Movements for Prosthetic Hand Function. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 612-620.	4.9	23
101	A kinematic and strain gauge study of the reciprocal apparatus in the equine hind limb. Journal of Biomechanics, 1992, 25, 1291-1301.	2.1	22
102	A Three-Dimensional Inverse Finite Element Analysis of the Heel Pad. Journal of Biomechanical Engineering, 2012, 134, 031002.	1.3	22
103	An Elaborate Data Set Characterizing the Mechanical Response of the Foot. Journal of Biomechanical Engineering, 2009, 131, 094502.	1.3	21
104	Semiactive Virtual Control Method for Robots with Regenerative Energy-Storing Joints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10244-10250.	0.4	21
105	Comparison of two methods of determining patellofemoral joint stress during dynamic activities. Gait and Posture, 2015, 42, 218-222.	1.4	21
106	Review of musculoskeletal modelling in a clinical setting: Current use in rehabilitation design, surgical decision making and healthcare interventions. Clinical Biomechanics, 2021, 83, 105292.	1.2	21
107	Quantification of skin displacement in the proximal parts of the limbs of the walking horse. Equine Veterinary Journal, 1990, 22, 110-118.	1.7	19
108	Personal navigation via shoe mounted inertial measurement units. , 2010, , .		19

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109	Inertial compensation for belt acceleration in an instrumented treadmill. Journal of Biomechanics, 2014, 47, 3758-3761.	2.1	17
110	Human-Like Rewards to Train a Reinforcement Learning Controller for Planar Arm Movement. IEEE Transactions on Human-Machine Systems, 2016, 46, 723-733.	3.5	17
111	A High-Fidelity Wearable System for Measuring Lower-Limb Kinetics and Kinematics. IEEE Sensors Journal, 2019, 19, 12482-12493.	4.7	17
112	Letters to the Editor. American Journal of Sports Medicine, 2006, 34, 312-313.	4.2	16
113	Robotic testing of proximal tibioâ€fibular joint kinematics for measuring instability following total knee arthroplasty. Journal of Orthopaedic Research, 2011, 29, 47-52.	2.3	15
114	Artefacts in measuring joint moments may lead to incorrect clinical conclusions: the nexus between science (biomechanics) and sports injury prevention!. British Journal of Sports Medicine, 2013, 47, 470-473.	6.7	15
115	Optimal control simulation predicts effects of midsole materials on energy cost of running. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 869-879.	1.6	15
116	Multi-Body Modelling and Simulation of Animal Locomotion. Cells Tissues Organs, 1993, 146, 95-102.	2.3	14
117	Mechanical properties of the tendinous equine interosseus muscle are affected by in vivo transducer implantation. Journal of Biomechanics, 1998, 31, 485-490.	2.1	14
118	Optimal design of a transfemoral prosthesis with energy storage and regeneration. , 2014, , .		14
119	Optimal design and control of an electromechanical transfemoral prosthesis with energy regeneration. PLoS ONE, 2017, 12, e0188266.	2.5	13
120	Peak ACL force during jump landing in downhill skiing is less sensitive to landing height than landing position. British Journal of Sports Medicine, 2018, 52, 1086-1090.	6.7	13
121	Impingement and stability of total hip arthroplasty versus femoral head resurfacing using a cadaveric robotics model. Journal of Orthopaedic Research, 2013, 31, 1108-1115.	2.3	12
122	Development of dynamic models of the Mauch prosthetic knee for prospective gait simulation. Journal of Biomechanics, 2014, 47, 3178-3184.	2.1	12
123	Assessing Vaginal Surgical Skills Using Video Motion Analysis. Obstetrics and Gynecology, 2009, 114, 244-251.	2.4	11
124	Simulation of lower limb axial arterial length change during locomotion. Journal of Biomechanics, 2012, 45, 1485-1490.	2.1	11
125	Simulation Analysis of Linear Quadratic Regulator Control of Sagittal-Plane Human Walkingâ€"Implications for Exoskeletons. Journal of Biomechanical Engineering, 2017, 139, .	1.3	11
126	Achilles tendon loads at walk measured using a novel ultrasonic technique. Computer Methods in Biomechanics and Biomedical Engineering, 2005, 8, 221-222.	1.6	10

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127	The role of the reciprocal apparatus in the hind limb of the horse investigated by a modified CODAâ€3 optoâ€electronic kinematic analysis system. Equine Veterinary Journal, 1990, 22, 95-100.	1.7	10
128	Evolutionary optimization of ground reaction force for a prosthetic leg testing robot. , 2014, , .		10
129	An approach to generate noncontact ACL-injury prone situations on a computer using kinematic data of non-injury situations and Monte Carlo simulation. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 3-10.	1.6	10
130	A solution method for predictive simulations in a stochastic environment. Journal of Biomechanics, 2020, 104, 109759.	2.1	10
131	Evaluating the Physical Realism of Character Animations Using Musculoskeletal Models. Lecture Notes in Computer Science, 2010, , 11-22.	1.3	9
132	An optimized proportional-derivative controller for the human upper extremity with gravity. Journal of Biomechanics, 2015, 48, 3692-3700.	2.1	9
133	Kinematic analysis of world championship three-day event horses jumping a cross-country drop fence. Journal of Equine Veterinary Science, 1995, 15, 527-531.	0.9	8
134	Pre-Impact Lower Extremity Posture and Brake Pedal Force Predict Foot and Ankle Forces During an Automobile Collision. Journal of Biomechanical Engineering, 2004, 126, 770-778.	1.3	8
135	An analytical model for rotator cuff repairs. Clinical Biomechanics, 2010, 25, 751-758.	1.2	8
136	Active disturbance rejection control for human postural sway. , 2011, , .		8
137	Multi-Objective Optimization of Impedance Parameters in a Prosthesis Test Robot. , 2015, , .		8
138	Identification of the human postural control system through stochastic trajectory optimization. Journal of Neuroscience Methods, 2020, 334, 108580.	2.5	8
139	Effect of Drop Height on Lower Extremity Biomechanical Measures in Female Athletes. Medicine and Science in Sports and Exercise, 2008, 40, S80.	0.4	7
140	A Method to Estimate the Initial Length of Equine Tendons. Cells Tissues Organs, 1993, 146, 120-122.	2.3	6
141	Computerâ€assisted gait analysis in equine orthopaedic practice: the case for inverse dynamic analysis. Equine Veterinary Journal, 1998, 30, 362-363.	1.7	6
142	Predictive simulation of gait in rehabilitation. , 2010, 2010, 5444-7.		6
143	The Contribution of the Acetabular Labrum to Hip Joint Stability: A Quantitative Analysis Using a Dynamic Three-Dimensional Robot Model. Journal of Biomechanical Engineering, 2015, 137, 061012.	1.3	6
144	An Anthropometrically Parameterized Assistive Lower Limb Exoskeleton. Journal of Biomechanical Engineering, 2021, 143, .	1.3	6

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145	Semiactive virtual control of a hydraulic prosthetic knee. , 2016, , .		5
146	Compensation for inertial and gravity effects in a moving force platform. Journal of Biomechanics, 2018, 75, 96-101.	2.1	5
147	Identification of Postural Controllers in Human Standing Balance. Journal of Biomechanical Engineering, 2021, 143, .	1.3	5
148	Early evaluation of a powered transfemoral prosthesis with force-modulated impedance control and energy regeneration. Medical Engineering and Physics, 2022, 100, 103744.	1.7	5
149	Biomch-L: An electronic mail discussion forum for biomechanics and movement science. Journal of Biomechanics, 1992, 25, 1367.	2.1	4
150	A model-based approach to predict neuromuscular control patterns that minimize ACL forces during jump landing. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 612-622.	1.6	4
151	Neuromuscular Control and Valgus Loading of the Knee Predict ACL Injury Risk in Female Athletes. Medicine and Science in Sports and Exercise, 2004, 36, S287.	0.4	4
152	Antagonistic co-contraction can minimize muscular effort in systems with uncertainty. PeerJ, 2022, 10, e13085.	2.0	4
153	Comment on â€œA stochastic biomechanical model for risk and risk factors of non-contact anterior cruciate ligament injuriesâ€• Journal of Biomechanics, 2009, 42, 1778-1779.	2.1	3
154	Eccentric training with a powered rowing machine. Medicine in Novel Technology and Devices, 2019, 2, 100008.	1.6	3
155	Backstepping Control of Open-Chain Linkages Actuated by Antagonistic Hill Muscles. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	3
156	opty: Software for trajectory optimization and parameter identification using direct collocation. Journal of Open Source Software, 2018, 3, 300.	4.6	3
157	Upper body estimation of muscle forces, muscle states, and joint motion using an extended Kalman filter. IET Control Theory and Applications, 2020, 14, 3204-3216.	2.1	3
158	Application of the Actor-Critic Architecture to Functional Electrical Stimulation Control of a Human Arm. Proceedings of the ... Innovative Applications of Artificial Intelligence Conference, 2009, 2009, 165-172.	1.0	3
159	ACL injuries: do we know the mechanisms?. Journal of Orthopaedic and Sports Physical Therapy, 2007, 37, A8-9.	3.5	3
160	Discussion. Comment on â€žQuadriceps protects the anterior cruciate ligamentâ€• Journal of Orthopaedic Research, 2002, 20, 1133-1134.	2.3	2
161	Authors' reply regarding â€œEffect of low pass filtering on joint moments from inverse dynamics: Implications for injury preventionâ€• Journal of Biomechanics, 2012, 45, 2059-2060.	2.1	2
162	Nonlinear Tracking Control of an Antagonistic Muscle Pair Actuated System. , 2017, , .		2

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163	Neuromuscular Control and Valgus Loading of the Knee Predict ACL Injury Risk in Female Athletes. Medicine and Science in Sports and Exercise, 2004, 36, S287.	0.4	2
164	Creating a Reinforcement Learning Controller for Functional Electrical Stimulation of a Human Arm. , 2008, 49326, 1-6.		2
165	Predicting neuromuscular control patterns that minimize ACL forces during injuryâ€prone jumpâ€landing manoeuvres in downhill skiing using a musculoskeletal simulation model. European Journal of Sport Science, 2023, 23, 703-713.	2.7	2
166	Estimation of Joint Moments During Turning Maneuvers in Alpine Skiing Using a Three Dimensional Musculoskeletal Skier Model and a Forward Dynamics Optimization Framework. Frontiers in Bioengineering and Biotechnology, 0, 10, .	4.1	2
167	Analysis of locomotion in the horse using computer aided engineering software. , 1988, , .		1
168	Transfer of eversion to internal leg rotation in running. Journal of Biomechanics, 1994, 27, 659.	2.1	1
169	Three dimensional stress analysis of the tibia during running. Journal of Biomechanics, 1994, 27, 826.	2.1	1
170	Concurrent Simulations of Musculoskeletal Movements and Tissue Deformations. , 2007, , 5.		1
171	Paper # 52: Evaluation of the Acetabular Labrum in Impingement Free Range of Motion and Dislocation Using a Novel Cadaveric Robotics Model. Arthroscopy - Journal of Arthroscopic and Related Surgery, 2011, 27, e102-e103.	2.7	1
172	Design and Hybrid Impedance Control of a Powered Rowing Machine. , 2017, , .		1
173	A Biomechanical Model for Augmented Human Rotator Cuff Repairs. , 2010, , .		1
174	BIOMCH-L: An Electronic Mail Discussion List for Biomechanics and Kinesiology. Journal of Biomechanical Engineering, 1989, 111, 93-94.	1.3	0
175	BIOMCH-L. Human Movement Science, 1992, 11, 525-527.	1.4	0
176	Isometric properties of lower extremity muscles in cyclists determined by least squares fitting of muscle models. Journal of Biomechanics, 1994, 27, 701.	2.1	0
177	<title>Direct dynamics simulation of FES-assisted locomotion</title>. , 1996, , .		0
178	Concurrent Simulation of Neuromuscular Control and Tissue Deformation Is Possible by Adaptive Surrogate Modeling. , 2008, , .		0
179	Evaluation of a system for real-time analysis of muscle function: Shoulder and elbow muscles. , 2009, , .		0
180	Gait Prediction Using Concurrent Musculoskeletal Control and FE Simulations. , 2009, , .		0

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181	On the System-Theoretic Passivity Properties of a Hill Muscle Model. , 2015, , .		0
182	Admittance control for an electromechanical rowing machine. , 2016, , .		0
183	A progressive-individualized midstance gait perturbation protocol for reactive balance assessment in stroke survivors. Journal of Biomechanics, 2021, 123, 110477.	2.1	0
184	Association Between Initial Contact Lower Limb Posture And Peak Knee Valgus Moment During Sidestepping. Medicine and Science in Sports and Exercise, 2005, 37, S278.	0.4	0
185	An Elaborate Data Set for Mechanical Characterization of the Foot. , 2008, , .		0
186	Modeling of Gait Adaptations to Minimize Plantar Tissue Strain During Walking. , 2010, , .		0
187	Mechanical Evaluation of Balloon-Type Gastrostomy Devices. Journal of Long-Term Effects of Medical Implants, 2013, 23, 31-37.	0.7	0
188	Computer Simulation as a Tool to Investigate ACL Injuries During Landing Movements in Downhill Skiing. , 1997, , 133-140.		0