David G Lloyd

List of Publications by Year
in descending order

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270 papers	15,414 citations	17440 63 h-index	23533 111 g-index
281 all docs	281 docs citations	281 times ranked	9081 citing authors

#	Article	IF	Citations
1	An EMG-driven musculoskeletal model to estimate muscle forces and knee joint moments in vivo. Journal of Biomechanics, 2003, 36, 765-776.	2.1	951
2	Neuromusculoskeletal Modeling: Estimation of Muscle Forces and Joint Moments and Movements from Measurements of Neural Command. Journal of Applied Biomechanics, 2004, 20, 367-395.	0.8	704
3	Grand challenge competition to predict in vivo knee loads. Journal of Orthopaedic Research, 2012, 30, 503-513.	2.3	449
4	Repeatability of gait data using a functional hip joint centre and a mean helical knee axis. Journal of Biomechanics, 2003, 36, 1159-1168.	2.1	434
5	External loading of the knee joint during running and cutting maneuvers. Medicine and Science in Sports and Exercise, 2001, 33, 1168-1175.	0.4	354
6	Anticipatory effects on knee joint loading during running and cutting maneuvers. Medicine and Science in Sports and Exercise, 2001, 33, 1176-1181.	0.4	336
7	Muscle and external load contribution to knee joint contact loads during normal gait. Journal of Biomechanics, 2009, 42, 2294-2300.	2.1	298
8	Muscle Activation Strategies at the Knee during Running and Cutting Maneuvers. Medicine and Science in Sports and Exercise, 2003, 35, 119-127.	0.4	289
9	Strategies of muscular support of varus and valgus isometric loads at the human knee. Journal of Biomechanics, 2001, 34, 1257-1267.	2.1	286
10	EMG-Driven Forward-Dynamic Estimation of Muscle Force and Joint Moment about Multiple Degrees of Freedom in the Human Lower Extremity. PLoS ONE, 2012, 7, e52618.	2.5	239
11	Sensori-motor Function, Gait Patterns and Falls in Community-dwelling Women. Age and Ageing, 1996, 25, 292-299.	1.6	230
12	CEINMS: A toolbox to investigate the influence of different neural control solutions on the prediction of muscle excitation and joint moments during dynamic motor tasks. Journal of Biomechanics, 2015, 48, 3929-3936.	2.1	223
13	Characteristics of anterior cruciate ligament injuries in Australian football. Journal of Science and Medicine in Sport, 2007, 10, 96-104.	1.3	222
14	Subject-specific knee joint geometry improves predictions of medial tibiofemoral contact forces. Journal of Biomechanics, 2013, 46, 2778-2786.	2.1	216
15	The Effect of Technique Change on Knee Loads during Sidestep Cutting. Medicine and Science in Sports and Exercise, 2007, 39, 1765-1773.	0.4	206
16	Knee joint kinematics, kinetics and muscle co-contraction in knee osteoarthritis patient gait. Clinical Biomechanics, 2009, 24, 833-841.	1.2	199
17	Changing Sidestep Cutting Technique Reduces Knee Valgus Loading. American Journal of Sports Medicine, 2009, 37, 2194-2200.	4.2	196
18	Gait selection in the ostrich: mechanical and metabolic characteristics of walking and running with and without an aerial phase. Proceedings of the Royal Society B: Biological Sciences, 2004, 271, 1091-1099.	2.6	162

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19	Hybrid neuromusculoskeletal modeling to best track joint moments using a balance between muscle excitations derived from electromyograms and optimization. Journal of Biomechanics, 2014, 47, 3613-3621.	2.1	158
20	The influence of surface slope on human gait characteristics: a study of urban pedestrians walking on an inclined surface. Ergonomics, 1996, 39, 677-692.	2.1	149
21	A Model of Load Sharing Between Muscles and Soft Tissues at the Human Knee During Static Tasks. Journal of Biomechanical Engineering, 1996, 118, 367-376.	1.3	135
22	Estimation of Muscle Forces and Joint Moments Using a Forward-Inverse Dynamics Model. Medicine and Science in Sports and Exercise, 2005, 37, 1911-1916.	0.4	135
23	A real-time EMG-driven virtual arm. Computers in Biology and Medicine, 2002, 32, 25-36.	7.0	130
24	Estimation of musculotendon kinematics in large musculoskeletal models using multidimensional B-splines. Journal of Biomechanics, 2012, 45, 595-601.	2.1	130
25	Pre-surgery knee joint loading patterns during walking predict the presence and severity of anterior knee pain after total knee arthroplasty. Journal of Orthopaedic Research, 2004, 22, 260-266.	2.3	128
26	The Effect of Exercise on Gait Patterns in Older Women: A Randomized Controlled Trial. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 1996, 51A, M64-M70.	3.6	125
27	Estimation of musculotendon parameters for scaled and subject specific musculoskeletal models using an optimization technique. Journal of Biomechanics, 2016, 49, 141-148.	2.1	124
28	Neural Data-Driven Musculoskeletal Modeling for Personalized Neurorehabilitation Technologies. IEEE Transactions on Biomedical Engineering, 2016, 63, 879-893.	4.2	121
29	Optimizing whole-body kinematics to minimize valgus knee loading during sidestepping: Implications for ACL injury risk. Journal of Biomechanics, 2012, 45, 1491-1497.	2.1	116
30	Reliability of four models for clinical gait analysis. Gait and Posture, 2017, 54, 325-331.	1.4	115
31	Joint kinematic calculation based on clinical direct kinematic versus inverse kinematic gait models. Journal of Biomechanics, 2016, 49, 1658-1669.	2.1	114
32	Morphologic Characteristics and Strength of the Hamstring Muscles Remain Altered at 2 Years After Use of a Hamstring Tendon Graft in Anterior Cruciate Ligament Reconstruction. American Journal of Sports Medicine, 2016, 44, 2589-2598.	4.2	114
33	Rationale for Training Programs to Reduce Anterior Cruciate Ligament Injuries in Australian Football. Journal of Orthopaedic and Sports Physical Therapy, 2001, 31, 645-654.	3.5	113
34	Traditional vs accelerated approaches to post-operative rehabilitation following matrix-induced autologous chondrocyte implantation (MACI): comparison of clinical, biomechanical and radiographic outcomes. Osteoarthritis and Cartilage, 2008, 16, 1131-1140.	1.3	112
35	Tibiofemoral contact forces during walking, running and sidestepping. Gait and Posture, 2016, 49, 78-85.	1.4	111
36	Safety and Effectiveness of a Nurse-Led Outreach Program for Assessment and Treatment of Chronic Hepatitis C in the Custodial Setting. Clinical Infectious Diseases, 2013, 56, 1078-1084.	5.8	109

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37	Running in ostriches (Struthio camelus): three-dimensional joint axes alignment and joint kinematics. Journal of Experimental Biology, 2007, 210, 2548-2562.	1.7	106
38	A musculoskeletal model of human locomotion driven by a low dimensional set of impulsive excitation primitives. Frontiers in Computational Neuroscience, 2013, 7, 79.	2.1	106
39	Estimation of the hip joint centre in human motion analysis: A systematic review. Clinical Biomechanics, 2015, 30, 319-329.	1.2	102
40	Kinematic and electromyography analysis of submaximal differences running on a firm surface compared with soft, dry sand.. European Journal of Applied Physiology, 2005, 94, 242-253.	2.5	99
41	Programmable mechanical stimulation influences tendon homeostasis in a bioreactor system. Biotechnology and Bioengineering, 2013, 110, 1495-1507.	3.3	99
42	An upper limb kinematic model for the examination of cricket bowling: A case study of Mutiah Muralitharan. Journal of Sports Sciences, 2000, 18, 975-982.	2.0	98
43	Neuromuscular Biomechanical Modeling to Understand Knee Ligament Loading. Medicine and Science in Sports and Exercise, 2005, 37, 1939-1947.	0.4	88
44	Biofeedback for Gait Retraining Based on Real-Time Estimation of Tibiofemoral Joint Contact Forces. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1612-1621.	4.9	88
45	Establishing outcome measures in early knee osteoarthritis. Nature Reviews Rheumatology, 2019, 15, 438-448.	8.0	88
46	Reappraisal of the comparative cost of human locomotion using gait-specific allometric analyses. Journal of Experimental Biology, 2007, 210, 3513-3524.	1.7	87
47	Evaluation of different analytical methods for subject-specific scaling of musculotendon parameters. Journal of Biomechanics, 2008, 41, 1682-1688.	2.1	86
48	Net forces during tethered simulation of underwater streamlined gliding and kicking techniques of the freestyle turn. Journal of Sports Sciences, 2000, 18, 801-807.	2.0	84
49	Lack of correlation between different measurements of proprioception in the knee. Journal of Bone and Joint Surgery: British Volume, 2002, 84, 614-618.	3.4	84
50	Adaptations for economical bipedal running: the effect of limb structure on three-dimensional joint mechanics. Journal of the Royal Society Interface, 2011, 8, 740-755.	3.4	82
51	Knee joint biomechanics following arthroscopic partial meniscectomy. Journal of Orthopaedic Research, 2008, 26, 1075-1080.	2.3	81
52	Muscle activity is different for humans performing static tasks which require force control and position control. Neuroscience Letters, 1995, 194, 61-64.	2.1	79
53	Training Affects Knee Kinematics and Kinetics in Cutting Maneuvers in Sport. Medicine and Science in Sports and Exercise, 2010, 42, 1535-1544.	0.4	79
54	Bioreactor Design for Tendon/Ligament Engineering. Tissue Engineering - Part B: Reviews, 2013, 19, 133-146.	4.8	79

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55	Increase in vastus medialis crossâ€sectional area is associated with reduced pain, cartilage loss, and joint replacement risk in knee osteoarthritis. Arthritis and Rheumatism, 2012, 64, 3917-3925.	6.7	75
56	Running Biomechanics and Lower Limb Strength Associated with Prior Hamstring Injury. Medicine and Science in Sports and Exercise, 2009, 41, 1942-1951.	0.4	74
57	A kinematic and kinetic analysis of walking after total knee arthroplasty with and without patellar resurfacing. Clinical Biomechanics, 2006, 21, 379-386.	1.2	72
58	Muscle Synergies May Improve Optimization Prediction of Knee Contact Forces During Walking. Journal of Biomechanical Engineering, 2014, 136, 021031.	1.3	71
59	Osteoarthritis year in review 2016: mechanics. Osteoarthritis and Cartilage, 2017, 25, 190-198.	1.3	71
60	We have the programme, what next? Planning the implementation of an injury prevention programme. Injury Prevention, 2017, 23, 273-280.	2.4	68
61	Changes in knee joint biomechanics following balance and technique training and a season of Australian football. British Journal of Sports Medicine, 2012, 46, 917-922.	6.7	67
62	An Anterior Cruciate Ligament Injury Prevention Framework: Incorporating the Recent Evidence. Research in Sports Medicine, 2012, 20, 239-262.	1.3	67
63	Non-negative matrix factorisation is the most appropriate method for extraction of muscle synergies in walking and running. Scientific Reports, 2020, 10, 8266.	3.3	67
64	Preventing lower limb injuries: Is the latest evidence being translated into the football field?. Journal of Science and Medicine in Sport, 2009, 12, 452-456.	1.3	65
65	Repeatability of 3D gait kinematics obtained from an electromagnetic tracking system during treadmill locomotion. Journal of Biomechanics, 2007, 40, 1504-1511.	2.1	64
66	Multidimensional Ground Reaction Forces and Moments From Wearable Sensor Accelerations via Deep Learning. IEEE Transactions on Biomedical Engineering, 2021, 68, 289-297.	4.2	63
67	Are external knee load and EMG measures accurate indicators of internal knee contact forces during gait?. Journal of Orthopaedic Research, 2013, 31, 921-929.	2.3	62
68	Accuracy and Reliability of Marker-Based Approaches to Scale the Pelvis, Thigh, and Shank Segments in Musculoskeletal Models. Journal of Applied Biomechanics, 2017, 33, 354-360.	0.8	62
69	Whole body kinematics and knee moments that occur during an overhead catch and landing task in sport. Clinical Biomechanics, 2012, 27, 466-474.	1.2	61
70	Tibiofemoral Contact Forces in the Anterior Cruciate Ligamentâ€“Reconstructed Knee. Medicine and Science in Sports and Exercise, 2016, 48, 2195-2206.	0.4	61
71	Repeatability of upper limb kinematics for children with and without cerebral palsy. Gait and Posture, 2010, 32, 10-17.	1.4	60
72	Effects of Different Visual Stimuli on Postures and Knee Moments during Sidestepping. Medicine and Science in Sports and Exercise, 2013, 45, 1740-1748.	0.4	60

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73	Real-time inverse kinematics and inverse dynamics for lower limb applications using OpenSim. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 436-445.	1.6	60
74	A hypothesis for the function of braking forces during running turns. Journal of Biomechanics, 2006, 39, 1611-1620.	2.1	59
75	Predicting athlete ground reaction forces and moments from motion capture. Medical and Biological Engineering and Computing, 2018, 56, 1781-1792.	2.8	59
76	Selective muscle activation following rapid varus/valgus perturbations at the knee. Medicine and Science in Sports and Exercise, 1996, 28, 870-876.	0.4	57
77	Knee Extension and Flexion Weakness in People With Knee Osteoarthritis: Is Antagonist Cocontraction a Factor?. Journal of Orthopaedic and Sports Physical Therapy, 2009, 39, 807-815.	3.5	55
78	Modeling the Human Knee for Assistive Technologies. IEEE Transactions on Biomedical Engineering, 2012, 59, 2642-2649.	4.2	55
79	Tibio-femoral cartilage defects 3â€“5 years following arthroscopic partial medial meniscectomy. Osteoarthritis and Cartilage, 2008, 16, 1526-1531.	1.3	54
80	Investigating Kinetics in the Freestyle Flip Turn Push-Off. Journal of Applied Biomechanics, 1999, 15, 242-252.	0.8	53
81	Subject-specific calibration of neuromuscular parameters enables neuromusculoskeletal models to estimate physiologically plausible hip joint contact forces in healthy adults. Journal of Biomechanics, 2018, 80, 111-120.	2.1	53
82	Predicting Athlete Ground Reaction Forces and Moments From Spatio-Temporal Driven CNN Models. IEEE Transactions on Biomedical Engineering, 2019, 66, 689-694.	4.2	53
83	Machine learning methods to support personalized neuromusculoskeletal modelling. Biomechanics and Modeling in Mechanobiology, 2020, 19, 1169-1185.	2.8	53
84	Moving towards transdisciplinarity: an ecological sustainable focus for science and mathematics preâ€service education in the primary/middle years. Asia-Pacific Journal of Teacher Education, 2008, 36, 19-33.	1.9	51
85	Subject-specific finite element analysis to characterize the influence of geometry and material properties in Achilles tendon rupture. Journal of Biomechanics, 2014, 47, 3598-3604.	2.1	51
86	When â€˜just doing itâ€™ is not enough: Assessing the fidelity of player performance of an injury prevention exercise program. Journal of Science and Medicine in Sport, 2015, 18, 272-277.	1.3	51
87	Accuracy of Partial Weight Bearing After Autologous Chondrocyte Implantation. Archives of Physical Medicine and Rehabilitation, 2008, 89, 1528-1534.	0.9	50
88	Knee Strength and Knee Adduction Moments following Arthroscopic Partial Meniscectomy. Medicine and Science in Sports and Exercise, 2008, 40, 991-997.	0.4	50
89	Neuromuscular adaptations to eccentric strength training in children and adolescents with cerebral palsy. Developmental Medicine and Child Neurology, 2010, 52, 358-363.	2.1	50
90	A calibrated EMG-informed neuromusculoskeletal model can appropriately account for muscle co-contraction in the estimation of hip joint contact forces in people with hip osteoarthritis. Journal of Biomechanics, 2019, 83, 134-142.	2.1	50

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91	MRI development and validation of two new predictive methods of glenohumeral joint centre location identification and comparison with established techniques. Journal of Biomechanics, 2009, 42, 1527-1532.	2.1	49
92	Muscle activation at the human knee during isometric flexion-extension and varus-valgus loads. Journal of Orthopaedic Research, 1997, 15, 11-17.	2.3	47
93	Predicting Knee Osteoarthritis. Annals of Biomedical Engineering, 2016, 44, 222-233.	2.5	47
94	Statistical shape modelling versus linear scaling: Effects on predictions of hip joint centre location and muscle moment arms in people with hip osteoarthritis. Journal of Biomechanics, 2019, 85, 164-172.	2.1	47
95	Individual muscle contributions to the swing phase of gait: An EMG-based forward dynamics modelling approach. Simulation Modelling Practice and Theory, 2007, 15, 1146-1155.	3.8	46
96	Why go bipedal? Locomotion and morphology in Australian agamid lizards. Journal of Experimental Biology, 2008, 211, 2058-2065.	1.7	46
97	The off-break and â€œdoosraâ€• Kinematic variations of elite and sub-elite bowlers in creating ball spin in cricket bowling. Sports Biomechanics, 2009, 8, 187-198.	1.6	46
98	Bridging the Gap Between Content and Context. Clinical Journal of Sport Medicine, 2015, 25, 221-229.	1.8	45
99	In vitro loading models for tendon mechanobiology. Journal of Orthopaedic Research, 2018, 36, 566-575.	2.3	45
100	Correlation between EMG-based co-activation measures and medial and lateral compartment loads of the knee during gait. Clinical Biomechanics, 2013, 28, 1014-1019.	1.2	44
101	Cyclic mechanical stimulation rescues achilles tendon from degeneration in a bioreactor system. Journal of Orthopaedic Research, 2015, 33, 1888-1896.	2.3	44
102	Bioinspired Technologies to Connect Musculoskeletal Mechanobiology to the Person for Training and Rehabilitation. Frontiers in Computational Neuroscience, 2017, 11, 96.	2.1	44
103	The MAP Client: User-Friendly Musculoskeletal Modelling Workflows. Lecture Notes in Computer Science, 2014, , 182-192.	1.3	44
104	Preventing Australian football injuries with a targeted neuromuscular control exercise programme: comparative injury rates from a training intervention delivered in a clustered randomised controlled trial. Injury Prevention, 2016, 22, 123-128.	2.4	43
105	Static optimization underestimates antagonist muscle activity at the glenohumeral joint: A musculoskeletal modeling study. Journal of Biomechanics, 2019, 97, 109348.	2.1	43
106	Direction Control in Standing Horizontal and Vertical Jumps. International Journal of Sport and Health Science, 2005, 3, 272-279.	0.2	42
107	Patellofemoral and tibiofemoral articular cartilage and subchondral bone health following arthroscopic partial medial meniscectomy. Knee Surgery, Sports Traumatology, Arthroscopy, 2012, 20, 970-978.	4.2	42
108	Soleus fascicle length changes are conserved between young and old adults at their preferred walking speed. Gait and Posture, 2013, 38, 764-769.	1.4	39

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109	The effects of electromyography-assisted modelling in estimating musculotendon forces during gait in children with cerebral palsy. Journal of Biomechanics, 2019, 92, 45-53.	2.1	39
110	A Prospective, Randomized Comparison of Traditional and Accelerated Approaches to Postoperative Rehabilitation following Autologous Chondrocyte Implantation: 2-Year Clinical Outcomes. Cartilage, 2010, 1, 180-187.	2.7	38
111	Effects of different technical coordinate system definitions on the three dimensional representation of the glenohumeral joint centre. Medical and Biological Engineering and Computing, 2009, 47, 543-550.	2.8	36
112	A Longitudinal Study of Strength and Gait after Arthroscopic Partial Meniscectomy. Medicine and Science in Sports and Exercise, 2013, 45, 2036-2043.	0.4	36
113	Achilles tendon stress is more sensitive to subject-specific geometry than subject-specific material properties: A finite element analysis. Journal of Biomechanics, 2017, 56, 26-31.	2.1	36
114	On-field player workload exposure and knee injury risk monitoring via deep learning. Journal of Biomechanics, 2019, 93, 185-193.	2.1	36
115	What do community football players think about different exercise-training programmes? Implications for the delivery of lower limb injury prevention programmes. British Journal of Sports Medicine, 2014, 48, 702-707.	6.7	35
116	Three dimensional microstructural network of elastin, collagen, and cells in Achilles tendons. Journal of Orthopaedic Research, 2017, 35, 1203-1214.	2.3	35
117	Do Moments and Strength Predict Cartilage Changes after Partial Meniscectomy?. Medicine and Science in Sports and Exercise, 2015, 47, 1549-1556.	0.4	34
118	Multiscale musculoskeletal modelling, dataâ€“model fusion and electromyography-informed modelling. Interface Focus, 2016, 6, 20150084.	3.0	34
119	Radiological Assessment of Accelerated versus Traditional Approaches to Postoperative Rehabilitation following Matrix-Induced Autologous Chondrocyte Implantation. Cartilage, 2011, 2, 60-72.	2.7	33
120	Towards a national sports safety strategy: addressing facilitators and barriers towards safety guideline uptake. Injury Prevention, 2011, 17, 1-10.	2.4	33
121	Cancellous bone and theropod dinosaur locomotion. Part IIIâ€”Inferring posture and locomotor biomechanics in extinct theropods, and its evolution on the line to birds. PeerJ, 2018, 6, e5777.	2.0	33
122	Effect of Ankle Taping on Knee and Ankle Joint Biomechanics in Sporting Tasks. Medicine and Science in Sports and Exercise, 2010, 42, 2089-2097.	0.4	32
123	Feasibility of using MRIs to create subject-specific parallel-mechanism joint models. Journal of Biomechanics, 2017, 53, 45-55.	2.1	32
124	Cancellous bone and theropod dinosaur locomotion. Part Iâ€”an examination of cancellous bone architecture in the hindlimb bones of theropods. PeerJ, 2018, 6, e5778.	2.0	32
125	Coding OSICS sports injury diagnoses in epidemiological studies: does the background of the coder matter?. British Journal of Sports Medicine, 2014, 48, 552-556.	6.7	31
126	Bone remodelling in the natural acetabulum is influenced by muscle forceâ€induced bone stress. International Journal for Numerical Methods in Biomedical Engineering, 2014, 30, 28-41.	2.1	31

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127	Muscle contributions to recovery from forward loss of balance by stepping. Journal of Biomechanics, 2014, 47, 667-674.	2.1	31
128	Biomechanical predictors of maximal balance recovery performance amongst community-dwelling older adults. Experimental Gerontology, 2015, 66, 39-46.	2.8	31
129	Toward modeling locomotion using electromyographyâ€informed 3D models: application to cerebral palsy. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2017, 9, e1368.	6.6	31
130	Neuromusculoskeletal Modeling-Based Prostheses for Recovery After Spinal Cord Injury. Frontiers in Neurorobotics, 2019, 13, 97.	2.8	31
131	A Marker-Based Mean Finite Helical Axis Model to Determine Elbow Rotation Axes and Kinematics in Vivo. Journal of Applied Biomechanics, 2010, 26, 305-315.	0.8	30
132	Evolution of limb bone loading and body size in varanid lizards. Journal of Experimental Biology, 2011, 214, 3013-3020.	1.7	30
133	Muscle contributions to medial tibiofemoral compartment contact loading following ACL reconstruction using semitendinosus and gracilis tendon grafts. PLoS ONE, 2017, 12, e0176016.	2.5	30
134	Increasing level of neuromusculoskeletal model personalisation to investigate joint contact forces in cerebral palsy: A twin case study. Clinical Biomechanics, 2020, 72, 141-149.	1.2	30
135	The influence of speed and size on avian terrestrial locomotor biomechanics: Predicting locomotion in extinct theropod dinosaurs. PLoS ONE, 2018, 13, e0192172.	2.5	30
136	Ground hardness and injury in community level Australian football. Journal of Science and Medicine in Sport, 2012, 15, 305-310.	1.3	29
137	Lizard tricks: Overcoming conflicting requirements of speed vs climbing ability by altering biomechanics of the lizard stride. Journal of Experimental Biology, 2013, 216, 3854-62.	1.7	29
138	Priorities for Investment in Injury Prevention in Community Australian Football. Clinical Journal of Sport Medicine, 2013, 23, 430-438.	1.8	29
139	Evaluating cost function criteria in predicting healthy gait. Journal of Biomechanics, 2021, 123, 110530.	2.1	29
140	Scientific evidence is just the starting point: A generalizable process for developing sports injury prevention interventions. Journal of Sport and Health Science, 2016, 5, 334-341.	6.5	28
141	The influence and biomechanical role of cartilage split line pattern on tibiofemoral cartilage stress distribution during the stance phase of gait. Biomechanics and Modeling in Mechanobiology, 2016, 15, 195-204.	2.8	28
142	Finding the sweet spot via personalised Achilles tendon training: the future is within reach. British Journal of Sports Medicine, 2019, 53, 11-12.	6.7	28
143	A conceptual framework for computational models of Achilles tendon homeostasis. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2013, 5, 523-538.	6.6	27
144	Effects of hip joint centre mislocation on gait kinematics of children with cerebral palsy calculated using patient-specific direct and inverse kinematic models. Gait and Posture, 2017, 57, 154-160.	1.4	27

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145	Tibiofemoral joint contact forces increase with load magnitude and walking speed but remain almost unchanged with different types of carried load. PLoS ONE, 2018, 13, e0206859.	2.5	27
146	Muscle activations to stabilize the knee following arthroscopic partial meniscectomy. Clinical Biomechanics, 2011, 26, 292-297.	1.2	26
147	Could Targeted Exercise Programmes Prevent Lower Limb Injury in Community Australian Football?. Sports Medicine, 2013, 43, 751-763.	6.5	26
148	Injuries in community-level Australian football: Results from a club-based injury surveillance system. Journal of Science and Medicine in Sport, 2015, 18, 651-655.	1.3	26
149	Different visual stimuli affect body reorientation strategies during sidestepping. Scandinavian Journal of Medicine and Science in Sports, 2017, 27, 492-500.	2.9	26
150	Reliability of functional and predictive methods to estimate the hip joint centre in human motion analysis in healthy adults. Gait and Posture, 2017, 53, 179-184.	1.4	26
151	Combining in silico and in vitro experiments to characterize the role of fascicle twist in the Achilles tendon. Scientific Reports, 2018, 8, 13856.	3.3	26
152	Targeted Achilles Tendon Training and Rehabilitation Using Personalized and Real-Time Multiscale Models of the Neuromusculoskeletal System. Frontiers in Bioengineering and Biotechnology, 2020, 8, 878.	4.1	26
153	A neuromusculoskeletal model of the human lower limb: Towards EMG-driven actuation of multiple joints in powered orthoses. , 2011, 2011, 5975441.		25
154	The Preventing Australian Football Injuries with Exercise (PAFIX) Study: a group randomised controlled trial. Injury Prevention, 2009, 15, e1-e1.	2.4	24
155	The reach and adoption of a coach-led exercise training programme in community football. British Journal of Sports Medicine, 2014, 48, 718-723.	6.7	23
156	Protocol for a multi-centre randomised controlled trial comparing arthroscopic hip surgery to physiotherapy-led care for femoroacetabular impingement (FAI): the Australian FASHIoN trial. BMC Musculoskeletal Disorders, 2017, 18, 406.	1.9	23
157	Minimal medical imaging can accurately reconstruct geometric bone models for musculoskeletal models. PLoS ONE, 2019, 14, e0205628.	2.5	23
158	Individuals with mild-to-moderate hip osteoarthritis walk with lower hip joint contact forces despite higher levels of muscle co-contraction compared to healthy individuals. Osteoarthritis and Cartilage, 2020, 28, 924-931.	1.3	23
159	Trunk, pelvis and lower limb walking biomechanics are similarly altered in those with femoroacetabular impingement syndrome regardless of cam morphology size. Gait and Posture, 2021, 83, 26-34.	1.4	23
160	Cancellous bone and theropod dinosaur locomotion. Part IIâ€”a new approach to inferring posture and locomotor biomechanics in extinct tetrapod vertebrates. PeerJ, 2018, 6, e5779.	2.0	23
161	The relationship between patellofemoral and tibiofemoral morphology and gait biomechanics following arthroscopic partial medial meniscectomy. Knee Surgery, Sports Traumatology, Arthroscopy, 2013, 21, 1097-1103.	4.2	22
162	Non-invasive approaches to functional recovery after spinal cord injury: Therapeutic targets and multimodal device interventions. Experimental Neurology, 2021, 339, 113612.	4.1	22

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163	A novel role for non-muscle Î³-actin in skeletal muscle sarcomere assembly. Experimental Cell Research, 2004, 297, 82-96.	2.6	21
164	Trabecular bone texture detected by plain radiography and variance orientation transform method is different between knees with and without cartilage defects. Journal of Orthopaedic Research, 2011, 29, 1161-1167.	2.3	21
165	Isokinetic knee extensor strength deficit following matrix-induced autologous chondrocyte implantation. Clinical Biomechanics, 2012, 27, 588-594.	1.2	21
166	Using step width to compare locomotor biomechanics between extinct, non-avian theropod dinosaurs and modern obligate bipeds. Journal of the Royal Society Interface, 2017, 14, 20170276.	3.4	21
167	Can Technique Modification Training Reduce Knee Moments in a Landing Task?. Journal of Applied Biomechanics, 2014, 30, 231-236.	0.8	20
168	Cartilage morphology at 2â€“3Âyears following anterior cruciate ligament reconstruction with or without concomitant meniscal pathology. Knee Surgery, Sports Traumatology, Arthroscopy, 2017, 25, 426-436.	4.2	20
169	Development and validation of subject-specific pediatric multibody knee kinematic models with ligamentous constraints. Journal of Biomechanics, 2019, 93, 194-203.	2.1	20
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