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List of Publications by Year
in descending order

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145 papers	9,758 citations	53939 47 h-index	43601 95 g-index
150 all docs	150 docs citations	150 times ranked	7084 citing authors

#	Article	IF	Citations
1	Assessment of reporting practices and reproducibility potential of a cohort of published studies in computational knee biomechanics. Journal of Orthopaedic Research, 2023, 41, 325-334.	1.2	5
2	Shoulder Joint Stiffness in a Functional Posture at Various Levels of Muscle Activation. IEEE Transactions on Biomedical Engineering, 2022, 69, 2192-2201.	2.5	2
3	Metatarsal Bone Marrow Edema on Magnetic Resonance Imaging and Its Correlation to Bone Stress Injuries in Male Collegiate Basketball Players. Orthopaedic Journal of Sports Medicine, 2022, 10, 232596712110635.	0.8	3
4	Free Achilles tendon strain during selected rehabilitation, locomotor, jumping, and landing tasks. Journal of Applied Physiology, 2022, 132, 956-965.	1.2	9
5	Morphological variation in paediatric lower limb bones. Scientific Reports, 2022, 12, 3251.	1.6	8
6	Shape-model scaled gait models can neglect segment markers without consequential change to inverse kinematics results. Journal of Biomechanics, 2022, 137, 111086.	0.9	4
7	Consensus for experimental design in electromyography (CEDE) project: High-density surface electromyography matrix. Journal of Electromyography and Kinesiology, 2022, 64, 102656.	0.7	22
8	A statistical shape model of soleus muscle morphology in spastic cerebral palsy. Scientific Reports, 2022, 12, 7711.	1.6	3
9	A Parameter Sensitivity Analysis on Multiple Finite Element Knee Joint Models. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	2.0	6
10	Cartilage thickness and bone shape variations as a function of sex, height, body mass, and age in young adult knees. Scientific Reports, 2022, 12, .	1.6	6
11	3D trunk orientation measured using inertial measurement units during anatomical and dynamic sports motions. Scandinavian Journal of Medicine and Science in Sports, 2021, 31, 358-370.	1.3	22
12	Deciphering the â€œArtâ€•in Modeling and Simulation of the Knee Joint: Variations in Model Development. Journal of Biomechanical Engineering, 2021, 143, .	0.6	9
13	A marker registration method to improve joint angles computed by constrained inverse kinematics. PLoS ONE, 2021, 16, e0252425.	1.1	11
14	Remote Patient Monitoring with Wearable Sensors Following Knee Arthroplasty. Sensors, 2021, 21, 5143.	2.1	26
15	A Method to Compare Heterogeneous Types of Bone and Cartilage Meshes. Journal of Biomechanical Engineering, 2021, 143, .	0.6	5
16	Consensus for experimental design in electromyography (CEDE) project: Terminology matrix. Journal of Electromyography and Kinesiology, 2021, 59, 102565.	0.7	29
17	Prevalence Of Metatarsal Bone Marrow Edema On MRI And Injury In Male Collegiate Basketball Players. Medicine and Science in Sports and Exercise, 2021, 53, 392-392.	0.2	0
18	Computational fluid dynamics simulations for <scp>3D</scp> muscle fiber architecture in finite element analysis: Comparisons between computational fluid dynamics and diffusion tensor imaging. International Journal for Numerical Methods in Biomedical Engineering, 2021, 37, e3521.	1.0	4

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19	Towards rapid prediction of personalised muscle mechanics: integration with diffusion tensor imaging. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2020, 8, 492-500.	1.3	6
20	The influence of running velocity on resultant tibial acceleration in runners. Sports Biomechanics, 2020, 19, 750-760.	0.8	17
21	The influence of an extra-articular implant on bone remodelling of the knee joint. Biomechanics and Modeling in Mechanobiology, 2020, 19, 37-46.	1.4	9
22	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.	2.0	26
23	An Unsupervised Data-Driven Model to Classify Gait Patterns in Children with Cerebral Palsy. Journal of Clinical Medicine, 2020, 9, 1432.	1.0	9
24	Shape model constrained scaling improves repeatability of gait data. Journal of Biomechanics, 2020, 107, 109838.	0.9	17
25	Consensus for experimental design in electromyography (CEDE) project: Amplitude normalization matrix. Journal of Electromyography and Kinesiology, 2020, 53, 102438.	0.7	170
26	The effectiveness of real-time haptic feedback gait retraining for reducing resultant tibial acceleration with runners. Physical Therapy in Sport, 2020, 43, 173-180.	0.8	23
27	An individualised approach to assess the sidestep manoeuvre in male rugby union athletes. Journal of Science and Medicine in Sport, 2020, 23, 1086-1092.	0.6	3
28	Shape is only a weak predictor of deep knee flexion kinematics in healthy and osteoarthritic knees. Journal of Orthopaedic Research, 2020, 38, 2250-2261.	1.2	4
29	Feature Engineering Workflow for Activity Recognition fromÂSynchronized Inertial MeasurementÂUnits. Communications in Computer and Information Science, 2020, , 223-231.	0.4	3
30	Coupled electromagnetic and thermal optimisation strategies for direct-drive linear permanent magnet synchronous motors. , 2020, , .		0
31	Automatic segmentation of the thumb trapeziometacarpal joint using parametric statistical shape modelling and random forest regression voting. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2019, 7, 297-301.	1.3	2
32	Finding the sweet spot via personalised Achilles tendon training: the future is within reach. British Journal of Sports Medicine, 2019, 53, 11-12.	3.1	28
33	Statistical shape modelling reveals large and distinct subchondral bony differences in osteoarthritic knees. Journal of Biomechanics, 2019, 93, 177-184.	0.9	22
34	Consensus for experimental design in electromyography (CEDE) project: Electrode selection matrix. Journal of Electromyography and Kinesiology, 2019, 48, 128-144.	0.7	95
35	Personalisation of biomechanical models for injury prevention. Footwear Science, 2019, 11, S9-S9.	0.8	0
36	Haptic biofeedback induces changes in ankle push-off during walking. Gait and Posture, 2019, 74, 76-82.	0.6	4

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37	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.	0.9	47
38	Soleus muscle weakness in cerebral palsy: Muscle architecture revealed with Diffusion Tensor Imaging. PLoS ONE, 2019, 14, e0205944.	1.1	15
39	Deciphering the â€œArtâ€•in Modeling and Simulation of the Knee Joint: Overall Strategy. Journal of Biomechanical Engineering, 2019, 141, .	0.6	34
40	Minimal medical imaging can accurately reconstruct geometric bone models for musculoskeletal models. PLoS ONE, 2019, 14, e0205628.	1.1	23
41	On the Use of Population-Based Statistical Models in Biomechanics. , 2019, , 229-237.		3
42	The measurement of tibial acceleration in runnersâ€”A review of the factors that can affect tibial acceleration during running and evidence-based guidelines for its use. Gait and Posture, 2019, 67, 12-24.	0.6	88
43	Patellofemoral cartilage stresses are most sensitive to variations in vastus medialis muscle forces. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 206-216.	0.9	16
44	Virtual trial to evaluate the robustness of cementless femoral stems to patient and surgical variation. Journal of Biomechanics, 2019, 82, 346-356.	0.9	17
45	The one-week and six-month reliability and variability of three-dimensional tibial acceleration in runners. Sports Biomechanics, 2018, 17, 1-10.	0.8	33
46	Influence of collars on the primary stability of cementless femoral stems: A finite element study using a diverse patient cohort. Journal of Orthopaedic Research, 2018, 36, 1185-1195.	1.2	34
47	Statistical modeling of the equine third metacarpal bone incorporating morphology and bone mineral density. PLoS ONE, 2018, 13, e0194406.	1.1	4
48	Combining in silico and in vitro experiments to characterize the role of fascicle twist in the Achilles tendon. Scientific Reports, 2018, 8, 13856.	1.6	26
49	Evaluating the primary stability of standard vs lateralised cementless femoral stems â€“ A finite element study using a diverse patient cohort. Clinical Biomechanics, 2018, 59, 101-109.	0.5	10
50	Fatigue Influences the Recruitment, but Not Structure, of Muscle Synergies. Frontiers in Human Neuroscience, 2018, 12, 217.	1.0	33
51	Early morphologic changes in trapeziometacarpal joint bones with osteoarthritis. Osteoarthritis and Cartilage, 2018, 26, 1338-1344.	0.6	17
52	Musculoskeletal Modelling and the Physiome Project. CISM International Centre for Mechanical Sciences, Courses and Lectures, 2018, , 123-174.	0.3	10
53	Application of a Simple Surveillance Method for Detecting the Prevalence and Impact of Overuse Injuries in Professional Men's Basketball. Journal of Strength and Conditioning Research, 2017, 31, 2734-2739.	1.0	14
54	Wearable lower limb haptic feedback device for retraining Foot Progression Angle and Step Width. Gait and Posture, 2017, 55, 177-183.	0.6	29

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55	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
56	Accuracy of femur reconstruction from sparse geometric data using a statistical shape model. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 566-576.	0.9	37
57	The effect of the sagittal ridge angle on cartilage stress in the equine metacarpo-phalangeal (fetlock) joint. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1140-1149.	0.9	4
58	Using partial least squares regression as a predictive tool in describing equine third metacarpal bone shape. Computer Methods in Biomechanics and Biomedical Engineering, 2017, 20, 1609-1612.	0.9	4
59	Trapeziometacarpal joint contact varies between men and women during three isometric functional tasks. Medical Engineering and Physics, 2017, 50, 43-49.	0.8	15
60	Design optimization of a direct-drive linear actuator assistive device for stroke. , 2017, , .		2
61	Bioinspired Technologies to Connect Musculoskeletal Mechanobiology to the Person for Training and Rehabilitation. Frontiers in Computational Neuroscience, 2017, 11, 96.	1.2	44
62	Determining skeletal muscle architecture with Laplacian simulations: a comparison with diffusion tensor imaging. Biomechanics and Modeling in Mechanobiology, 2017, 16, 1845-1855.	1.4	18
63	Lower limb estimation from sparse landmarks using an articulated shape model. Journal of Biomechanics, 2016, 49, 3875-3881.	0.9	60
64	Predictive statistical models of baseline variations in 3-D femoral cortex morphology. Medical Engineering and Physics, 2016, 38, 450-457.	0.8	50
65	Lower Extremity Lateral Skin Stretch Perception for Haptic Feedback. IEEE Transactions on Haptics, 2016, 9, 62-68.	1.8	19
66	Multiscale musculoskeletal modelling, dataâ€“model fusion and electromyography-informed modelling. Interface Focus, 2016, 6, 20150084.	1.5	34
67	Predicting Knee Osteoarthritis. Annals of Biomedical Engineering, 2016, 44, 222-233.	1.3	47
68	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.	1.4	28
69	Evaluation of Parallel Authentic Research-Based Courses in Human Biology on Student Experiences at Stanford University and the University of Gothenburg. Journal of the Scholarship of Teaching and Learning, 2016, 16, 70-91.	0.2	3
70	Tactile Apparent Movement as a Modality for Lower Limb Haptic Feedback. Lecture Notes in Computer Science, 2016, , 373-383.	1.0	1
71	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.	0.9	223
72	The Role of Cartilage Stress in Patellofemoral Pain. Medicine and Science in Sports and Exercise, 2015, 47, 2416-2422.	0.2	25

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73	T1Ï•Dispersion in Articular Cartilage. Cartilage, 2015, 6, 113-122.	1.4	21
74	Men and women have similarly shaped carpometacarpal joint bones. Journal of Biomechanics, 2015, 48, 3420-3426.	0.9	38
75	Running with a load increases leg stiffness. Journal of Biomechanics, 2015, 48, 1003-1008.	0.9	71
76	Muscle Synergies May Improve Optimization Prediction of Knee Contact Forces During Walking. Journal of Biomechanical Engineering, 2014, 136, 021031.	0.6	71
77	Optimal haptic feedback control of artificial muscles. , 2014, , .		0
78	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.	0.9	51
79	The MAP Client: User-Friendly Musculoskeletal Modelling Workflows. Lecture Notes in Computer Science, 2014, , 182-192.	1.0	44
80	Subject-specific knee joint geometry improves predictions of medial tibiofemoral contact forces. Journal of Biomechanics, 2013, 46, 2778-2786.	0.9	216
81	Toe-in gait reduces the first peak knee adduction moment in patients with medial compartment knee osteoarthritis. Journal of Biomechanics, 2013, 46, 122-128.	0.9	166
82	Changes in in vivo knee contact forces through gait modification. Journal of Orthopaedic Research, 2013, 31, 434-440.	1.2	42
83	Patellar maltracking is prevalent among patellofemoral pain subjects with patella alta: An upright, weightbearing MRI study. Journal of Orthopaedic Research, 2013, 31, 448-457.	1.2	63
84	Men and women adopt similar walking mechanics and muscle activation patterns during load carriage. Journal of Biomechanics, 2013, 46, 2522-2528.	0.9	101
85	A conceptual framework for computational models of Achilles tendon homeostasis. Wiley Interdisciplinary Reviews: Systems Biology and Medicine, 2013, 5, 523-538.	6.6	27
86	Fiducial markerâ€based correction for involuntary motion in weightâ€bearing Câ€arm CT scanning of knees. Part I. Numerical modelâ€based optimization. Medical Physics, 2013, 40, 091905.	1.6	32
87	Update on Grand Challenge Competition to Predict in Vivo Knee Loads. Journal of Biomechanical Engineering, 2013, 135, 021012.	0.6	78
88	Test-Retest and Interrater Reliability of the Functional Movement Screen. Journal of Athletic Training, 2013, 48, 331-336.	0.9	92
89	Sixâ€week gait retraining program reduces knee adduction moment, reduces pain, and improves function for individuals with medial compartment knee osteoarthritis. Journal of Orthopaedic Research, 2013, 31, 1020-1025.	1.2	181
90	Are external knee load and EMG measures accurate indicators of internal knee contact forces during gait?. Journal of Orthopaedic Research, 2013, 31, 921-929.	1.2	62

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91	A Viscoelastic Constitutive Model Can Accurately Represent Entire Creep Indentation Tests of Human Patella Cartilage. Journal of Applied Biomechanics, 2013, 29, 292-302.	0.3	30
92	Muscle Synergy Constraints Improve Prediction of Knee Contact Force During Gait. , 2013, , .		0
93	Investigation of the role of crimps in collagen fibers in tendon with a microstructually based finite element model. , 2012, 2012, 4871-4.		2
94	Correlation Between In Vivo Knee Contact Forces and External Measures During Gait. , 2012, , .		0
95	Muscle force transmission to operational space accelerations during elite golf swings. , 2012, , .		8
96	Predicting the metabolic cost of incline walking from muscle activity and walking mechanics. Journal of Biomechanics, 2012, 45, 1842-1849.	0.9	106
97	Passive and Dynamic Shoulder Rotation Range in Uninjured and Previously Injured Overhead Throwing Athletes and the Effect of Shoulder Taping. PM and R, 2012, 4, 111-116.	0.9	17
98	Experimental Evaluation of Computationally Predicted Changes in Knee Loads Resulting From Medial Thrust Gait. , 2012, , .		0
99	Comparison of MRI and ¹⁸Fâ€NaF PET/CT in patients with patellofemoral pain. Journal of Magnetic Resonance Imaging, 2012, 36, 928-932.	1.9	36
100	Patellar tilt correlates with vastus lateralis: Vastus medialis activation ratio in maltracking patellofemoral pain patients. Journal of Orthopaedic Research, 2012, 30, 927-933.	1.2	78
101	Patients with patellofemoral pain exhibit elevated bone metabolic activity at the patellofemoral joint. Journal of Orthopaedic Research, 2012, 30, 209-213.	1.2	63
102	Grand challenge competition to predict in vivo knee loads. Journal of Orthopaedic Research, 2012, 30, 503-513.	1.2	449
103	Changes in Medial Knee Contact Force Through Gait Modification. , 2012, , .		0
104	Reliability and Accuracy of a Video Analysis Protocol to Assess Core Ability. PM and R, 2011, 3, 204-211.	0.9	7
105	Patellar Maltracking Correlates With Vastus Medialis Activation Delay in Patellofemoral Pain Patients. American Journal of Sports Medicine, 2011, 39, 590-598.	1.9	95
106	Muscle activations to stabilize the knee following arthroscopic partial meniscectomy. Clinical Biomechanics, 2011, 26, 292-297.	0.5	26
107	Prediction of glycosaminoglycan content in human cartilage by age, T1Ï•and T2 MRI. Osteoarthritis and Cartilage, 2011, 19, 171-179.	0.6	151
108	Differences in patellofemoral kinematics between weightâ€bearing and nonâ€weightâ€bearing conditions in patients with patellofemoral pain. Journal of Orthopaedic Research, 2011, 29, 312-317.	1.2	93

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109	Effect of shoulder taping on maximum shoulder external and internal rotation range in uninjured and previously injured overhead athletes during a seated throw. Journal of Orthopaedic Research, 2011, 29, 1406-1411.	1.2	19
110	Training multi-parameter gaits to reduce the knee adduction moment with data-driven models and haptic feedback. Journal of Biomechanics, 2011, 44, 1605-1609.	0.9	118
111	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.	1.5	82
112	Influence of Stretching and Warm-Up on Achilles Tendon Material Properties. Foot and Ankle International, 2011, 32, 407-413.	1.1	24
113	Real-Time Knee Adduction Moment Feedback for Gait Retraining Through Visual and Tactile Displays. Journal of Biomechanical Engineering, 2011, 133, 041007.	0.6	82
114	Imaging and Musculoskeletal Modeling to Investigate the Mechanical Etiology of Patellofemoral Pain. , 2011, , 269-286.		4
115	Feasibility of Highly Constrained Muscle Force Predictions for the Knee During Gait. , 2011, , .		1
116	Training Affects Knee Kinematics and Kinetics in Cutting Maneuvers in Sport. Medicine and Science in Sports and Exercise, 2010, 42, 1535-1544.	0.2	79
117	Haptic gait retraining for knee osteoarthritis treatment. , 2010, , .		35
118	Using realâ€time MRI to quantify altered joint kinematics in subjects with patellofemoral pain and to evaluate the effects of a patellar brace or sleeve on joint motion. Journal of Orthopaedic Research, 2009, 27, 571-577.	1.2	116
119	Knee muscle forces during walking and running in patellofemoral pain patients and pain-free controls. Journal of Biomechanics, 2009, 42, 898-905.	0.9	202
120	Muscle and external load contribution to knee joint contact loads during normal gait. Journal of Biomechanics, 2009, 42, 2294-2300.	0.9	298
121	The phenomenon of twisted growth: humeral torsion in dominant arms of high performance tennis players. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 83-93.	0.9	31
122	New resource for the computation of cartilage biphasic material properties with the interpolant response surface method. Computer Methods in Biomechanics and Biomedical Engineering, 2009, 12, 415-422.	0.9	23
123	Feasibility of using realâ€time MRI to measure joint kinematics in 1.5T and openâ€bore 0.5T systems. Journal of Magnetic Resonance Imaging, 2008, 28, 158-166.	1.9	42
124	Knee joint biomechanics following arthroscopic partial meniscectomy. Journal of Orthopaedic Research, 2008, 26, 1075-1080.	1.2	81
125	The influence of femoral internal and external rotation on cartilage stresses within the patellofemoral joint. Journal of Orthopaedic Research, 2008, 26, 1627-1635.	1.2	96
126	Knee Strength and Knee Adduction Moments following Arthroscopic Partial Meniscectomy. Medicine and Science in Sports and Exercise, 2008, 40, 991-997.	0.2	50

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127	Running in ostriches (Struthio camelus): three-dimensional joint axes alignment and joint kinematics. Journal of Experimental Biology, 2007, 210, 2548-2562.	0.8	106
128	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.	2.2	46
129	A hypothesis for the function of braking forces during running turns. Journal of Biomechanics, 2006, 39, 1611-1620.	0.9	59
130	Is cartilage thickness different in young subjects with and without patellofemoral pain?. Osteoarthritis and Cartilage, 2006, 14, 931-937.	0.6	57
131	A Modeling Framework to Estimate Patellofemoral Joint Cartilage Stress In Vivo. Medicine and Science in Sports and Exercise, 2005, 37, 1924-1930.	0.2	145
132	Estimation of Muscle Forces and Joint Moments Using a Forward-Inverse Dynamics Model. Medicine and Science in Sports and Exercise, 2005, 37, 1911-1916.	0.2	135
133	Neuromuscular Biomechanical Modeling to Understand Knee Ligament Loading. Medicine and Science in Sports and Exercise, 2005, 37, 1939-1947.	0.2	88
134	Patellofemoral joint contact area increases with knee flexion and weight-bearing. Journal of Orthopaedic Research, 2005, 23, 345-350.	1.2	184
135	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.	1.2	99
136	Direction Control in Standing Horizontal and Vertical Jumps. International Journal of Sport and Health Science, 2005, 3, 272-279.	0.0	42
137	Weight-bearing MRI of patellofemoral joint cartilage contact area. Journal of Magnetic Resonance Imaging, 2004, 20, 526-530.	1.9	77
138	Neuromusculoskeletal Modeling: Estimation of Muscle Forces and Joint Moments and Movements from Measurements of Neural Command. Journal of Applied Biomechanics, 2004, 20, 367-395.	0.3	704
139	Repeatability of gait data using a functional hip joint centre and a mean helical knee axis. Journal of Biomechanics, 2003, 36, 1159-1168.	0.9	434
140	An EMG-driven musculoskeletal model to estimate muscle forces and knee joint moments in vivo. Journal of Biomechanics, 2003, 36, 765-776.	0.9	951
141	Muscle Activation Strategies at the Knee during Running and Cutting Maneuvers. Medicine and Science in Sports and Exercise, 2003, 35, 119-127.	0.2	289
142	The measurement of shoulder alignment in cricket fast bowling. Journal of Sports Sciences, 2002, 20, 507-510.	1.0	18
143	Anticipatory effects on knee joint loading during running and cutting maneuvers. Medicine and Science in Sports and Exercise, 2001, 33, 1176-1181.	0.2	336
144	External loading of the knee joint during running and cutting maneuvers. Medicine and Science in Sports and Exercise, 2001, 33, 1168-1175.	0.2	354

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145	Internal Rotation of the Upper-Arm Segment during a Stretch-Shorten Cycle Movement. Journal of Applied Biomechanics, 1999, 15, 381-395.	0.3	24