

Andrew A Biewener

List of Publications by Year in descending order

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Version: 2024-02-01

168
papers

11,303
citations

26567

56
h-index

33814

99
g-index

176
all docs

176
docs citations

176
times ranked

5702
citing authors

#	ARTICLE	IF	CITATIONS
1	Scaling body support in mammals: limb posture and muscle mechanics. <i>Science</i> , 1989, 245, 45-48.	6.0	738
2	Biomechanics of mammalian terrestrial locomotion. <i>Science</i> , 1990, 250, 1097-1103.	6.0	492
3	Bipedal locomotion: effects of speed, size and limb posture in birds and humans. <i>Journal of Zoology</i> , 1991, 224, 127-147.	0.8	378
4	Adaptive changes in trabecular architecture in relation to functional strain patterns and disuse. <i>Bone</i> , 1996, 19, 1-8.	1.4	318
5	Biomechanical consequences of scaling. <i>Journal of Experimental Biology</i> , 2005, 208, 1665-1676.	0.8	294
6	Energetics and mechanics of human running on surfaces of different stiffnesses. <i>Journal of Applied Physiology</i> , 2002, 92, 469-478.	1.2	289
7	Muscle mechanical advantage of human walking and running: implications for energy cost. <i>Journal of Applied Physiology</i> , 2004, 97, 2266-2274.	1.2	234
8	Muscle-tendon stresses and elastic energy storage during locomotion in the horse. <i>Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology</i> , 1998, 120, 73-87.	0.7	228
9	Neuromechanics: an integrative approach for understanding motor control. <i>Integrative and Comparative Biology</i> , 2007, 47, 16-54.	0.9	226
10	Comparative power curves in bird flight. <i>Nature</i> , 2003, 421, 363-366.	13.7	224
11	Bone stress in the horse forelimb during locomotion at different gaits: A comparison of two experimental methods. <i>Journal of Biomechanics</i> , 1983, 16, 565-576.	0.9	222
12	Bone curvature: Sacrificing strength for load predictability?. <i>Journal of Theoretical Biology</i> , 1988, 131, 75-92.	0.8	207
13	Three-dimensional kinematics of hummingbird flight. <i>Journal of Experimental Biology</i> , 2007, 210, 2368-2382.	0.8	207
14	Running over rough terrain reveals limb control for intrinsic stability. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 15681-15686.	3.3	180
15	Differential scaling of the long bones in the terrestrial carnivora and other mammals. <i>Journal of Morphology</i> , 1990, 204, 157-169.	0.6	179
16	Muscle force-length dynamics during level versus incline locomotion: a comparison of in vivo performance of two guinea fowl ankle extensors. <i>Journal of Experimental Biology</i> , 2003, 206, 2941-2958.	0.8	174
17	Musculoskeletal design in relation to body size. <i>Journal of Biomechanics</i> , 1991, 24, 19-29.	0.9	170
18	Hindlimb muscle function in relation to speed and gait: <i>in vivo</i> patterns of strain and activation in a hip and knee extensor of the rat (<i>Rattus norvegicus</i>). <i>Journal of Experimental Biology</i> , 2001, 204, 2717-2731.	0.8	156

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19	Kinematic and Electromyographic Analysis of the Functional Role of the Body Axis During Terrestrial and Aquatic Locomotion in the Salamander <i>Ambystoma Tigrinum</i> . Journal of Experimental Biology, 1992, 162, 107-130.	0.8	155
20	Bone modeling during growth: Dynamic strain equilibrium in the chick tibiotarsus. Calcified Tissue International, 1986, 39, 390-395.	1.5	153
21	Muscle Function in vivo: A Comparison of Muscles used for Elastic Energy Savings versus Muscles Used to Generate Mechanical Power. American Zoologist, 1998, 38, 703-717.	0.7	152
22	Unsteady locomotion: integrating muscle function with whole body dynamics and neuromuscular control. Journal of Experimental Biology, 2007, 210, 2949-2960.	0.8	147
23	Safety factors in bone strength. Calcified Tissue International, 1993, 53, S68-S74.	1.5	142
24	Mechanical power output of bird flight. Nature, 1997, 390, 67-70.	13.7	137
25	Running over rough terrain: guinea fowl maintain dynamic stability despite a large unexpected change in substrate height. Journal of Experimental Biology, 2006, 209, 171-187.	0.8	134
26	Structural response of growing bone to exercise and disuse. Journal of Applied Physiology, 1994, 76, 946-955.	1.2	129
27	Mammalian Terrestrial Locomotion and Size. BioScience, 1989, 39, 776-783.	2.2	118
28	Wing inertia and whole-body acceleration: an analysis of instantaneous aerodynamic force production in cockatiels (<i>Nymphicus hollandicus</i>) flying across a range of speeds. Journal of Experimental Biology, 2004, 207, 1689-1702.	0.8	112
29	Animal Locomotion. , 2018, , .		112
30	In vivo strain in the humerus of pigeons (<i>Columba livia</i>) during flight. Journal of Morphology, 1995, 225, 61-75.	0.6	110
31	Muscle function in avian flight: achieving power and control. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 1496-1506.	1.8	109
32	Telemetered in vivo strain analysis of locomotor mechanics of brachiating gibbons. Nature, 1989, 342, 270-272.	13.7	105
33	Walking and running in the red-legged running frog, <i>Kassina maculata</i> . Journal of Experimental Biology, 2004, 207, 399-410.	0.8	104
34	The role of intrinsic muscle mechanics in the neuromuscular control of stable running in the guinea fowl. Journal of Physiology, 2009, 587, 2693-2707.	1.3	102
35	Estimates of circulation and gait change based on a three-dimensional kinematic analysis of flight in cockatiels (<i>Nymphicus hollandicus</i>) and ringed turtle-doves (<i>Streptopelia risoria</i>). Journal of Experimental Biology, 2002, 205, 1389-1409.	0.8	102
36	Dynamic pressure maps for wings and tails of pigeons in slow, flapping flight, and their energetic implications. Journal of Experimental Biology, 2005, 208, 355-369.	0.8	87

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37	Patterns of mechanical energy change in tetrapod gait: pendula, springs and work. <i>Journal of Experimental Zoology Part A, Comparative Experimental Biology</i> , 2006, 305A, 899-911.	1.3	84
38	Wing and body kinematics of takeoff and landing flight in the pigeon (<i>Columba livia</i>). <i>Journal of Experimental Biology</i> , 2010, 213, 1651-1658.	0.8	82
39	Mechanics of locomotion and jumping in the horse (<i>Equus</i>): in vivo stress in the tibia and metatarsus. <i>Journal of Zoology</i> , 1988, 214, 547-565.	0.8	81
40	Pectoralis Muscle Force and Power Output During Flight in the Starling. <i>Journal of Experimental Biology</i> , 1992, 164, 1-18.	0.8	80
41	How cockatiels (<i>Nymphicus hollandicus</i>) modulate pectoralis power output across flight speeds. <i>Journal of Experimental Biology</i> , 2003, 206, 1363-1378.	0.8	79
42	In Vivo and In Vitro Heterogeneity of Segment Length Changes in the Semimembranosus Muscle of the Toad. <i>Journal of Physiology</i> , 2003, 549, 877-888.	1.3	78
43	Skeletal strain patterns and growth in the emu hindlimb during ontogeny. <i>Journal of Experimental Biology</i> , 2007, 210, 2676-2690.	0.8	77
44	Contractile properties of the pigeon supracoracoideus during different modes of flight. <i>Journal of Experimental Biology</i> , 2008, 211, 170-179.	0.8	77
45	Leg muscles that mediate stability: mechanics and control of two distal extensor muscles during obstacle negotiation in the guinea fowl. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 1580-1591.	1.8	73
46	Effects of surface grade on proximal hindlimb muscle strain and activation during rat locomotion. <i>Journal of Applied Physiology</i> , 2002, 93, 1731-1743.	1.2	72
47	Dynamics of leg muscle function in tammar wallabies (<i>M. eugenii</i>) during level versus incline hopping. <i>Journal of Experimental Biology</i> , 2004, 207, 211-223.	0.8	72
48	Ontogenetic patterns of limb loading, in vivo bone strains and growth in the goat radius. <i>Journal of Experimental Biology</i> , 2004, 207, 2577-2588.	0.8	71
49	Pigeons steer like helicopters and generate down- and upstroke lift during low speed turns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 19990-19995.	3.3	71
50	Experimental alteration of limb posture in the chicken (<i>Gallus gallus</i>) and its bearing on the use of birds as analogs for dinosaur locomotion. <i>Journal of Morphology</i> , 1999, 240, 237-249.	0.6	70
51	Comparison of human gastrocnemius forces predicted by Hill-type muscle models and estimated from ultrasound images. <i>Journal of Experimental Biology</i> , 2017, 220, 1643-1653.	0.8	68
52	Hind limb scaling of kangaroos and wallabies (superfamily Macropodoidea): implications for hopping performance, safety factor and elastic savings. <i>Journal of Anatomy</i> , 2008, 212, 153-163.	0.9	67
53	Wing kinematics of avian flight across speeds. <i>Journal of Avian Biology</i> , 2003, 34, 177-184.	0.6	66
54	Low speed maneuvering flight of the rose-breasted cockatoo (<i>Eolophus roseicapillus</i>). I. Kinematic and neuromuscular control of turning. <i>Journal of Experimental Biology</i> , 2007, 210, 1897-1911.	0.8	65

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55	Allometry and curvature in the long bones of quadrupedal mammals. <i>Journal of Zoology</i> , 1992, 226, 455-467.	0.8	64
56	Functional diversification within and between muscle synergists during locomotion. <i>Biology Letters</i> , 2008, 4, 41-44.	1.0	64
57	Outrun or Outmaneuver: Predator–Prey Interactions as a Model System for Integrating Biomechanical Studies in a Broader Ecological and Evolutionary Context. <i>Integrative and Comparative Biology</i> , 2015, 55, icv074.	0.9	64
58	Unpredictability of escape trajectory explains predator evasion ability and microhabitat preference of desert rodents. <i>Nature Communications</i> , 2017, 8, 440.	5.8	64
59	Locomotion as an emergent property of muscle contractile dynamics. <i>Journal of Experimental Biology</i> , 2016, 219, 285-294.	0.8	61
60	Morphological and kinematic basis of the hummingbird flight stroke: scaling of flight muscle transmission ratio. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 1986-1992.	1.2	60
61	Regional patterns of pectoralis fascicle strain in the pigeon <i>Columba livia</i> during level flight. <i>Journal of Experimental Biology</i> , 2005, 208, 771-786.	0.8	59
62	Negotiating obstacles: running kinematics of the lizard <i>Sceloporus malachiticus</i> . <i>Journal of Zoology</i> , 2006, 270, 359-371.	0.8	59
63	Estimates of circulation and gait change based on a three-dimensional kinematic analysis of flight in cockatiels (<i>Nymphicus hollandicus</i>) and ringed turtle-doves (<i>Streptopelia risoria</i>). <i>Journal of Experimental Biology</i> , 2002, 205, 1389-409.	0.8	53
64	Through the eyes of a bird: modelling visually guided obstacle flight. <i>Journal of the Royal Society Interface</i> , 2014, 11, 20140239.	1.5	52
65	Muscle function during takeoff and landing flight in the pigeon (<i>Columba livia</i>). <i>Journal of Experimental Biology</i> , 2012, 215, 4104-14.	0.8	51
66	Accuracy of gastrocnemius muscles forces in walking and running goats predicted by one-element and two-element Hill-type models. <i>Journal of Biomechanics</i> , 2013, 46, 2288-2295.	0.9	51
67	Low speed maneuvering flight of the rose-breasted cockatoo (<i>Eolophus roseicapillus</i>). II. Inertial and aerodynamic reorientation. <i>Journal of Experimental Biology</i> , 2007, 210, 1912-1924.	0.8	50
68	Joint work and power associated with acceleration and deceleration in tammar wallabies (<i>Macropus</i>). <i>Journal of Experimental Biology</i> , 2007, 210, 1912-1924.	0.8	49
69	Patterns of strain and activation in the thigh muscles of goats across gaits during level locomotion. <i>Journal of Experimental Biology</i> , 2005, 208, 4599-4611.	0.8	49
70	A Muscle's Force Depends on the Recruitment Patterns of Its Fibers. <i>Annals of Biomedical Engineering</i> , 2012, 40, 1708-1720.	1.3	48
71	Compliance, actuation, and work characteristics of the goat foreleg and hindleg during level, uphill, and downhill running. <i>Journal of Applied Physiology</i> , 2008, 104, 130-141.	1.2	47
72	A collisional perspective on quadrupedal gait dynamics. <i>Journal of the Royal Society Interface</i> , 2011, 8, 1480-1486.	1.5	47

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73	Future directions for the analysis of musculoskeletal design and locomotor performance. <i>Journal of Morphology</i> , 2002, 252, 38-51.	0.6	42
74	Dynamics of goat distal hind limb muscle-tendon function in response to locomotor grade. <i>Journal of Experimental Biology</i> , 2009, 212, 2092-2104.	0.8	42
75	The functional morphology of xenarthrous vertebrae in the armadillo <i>Dasypus novemcinctus</i> (Mammalia, Xenarthra). <i>Journal of Morphology</i> , 1992, 214, 63-81.	0.6	40
76	The effect of fast and slow motor unit activation on whole-muscle mechanical performance: the size principle may not pose a mechanical paradox. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2014, 281, 20140002.	1.2	40
77	Hummingbird flight stability and control in freestream turbulent winds. <i>Journal of Experimental Biology</i> , 2015, 218, 1444-52.	0.8	40
78	The aerodynamics of avian take-off from direct pressure measurements in Canada geese (<i>Branta</i>). <i>Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 5</i>	0.8	39
79	Modulation of in vivo muscle power output during swimming in the African clawed frog (<i>Xenopus</i>). <i>Tj ETQq1 1 0.784314 rgBT /Overlock</i>	0.8	39
80	Effects of flight speed upon muscle activity in hummingbirds. <i>Journal of Experimental Biology</i> , 2010, 213, 2515-2523.	0.8	39
81	Hummingbird flight. <i>Current Biology</i> , 2012, 22, R472-R477.	1.8	39
82	Asymmetrical Force Production in the Maneuvering Flight of Pigeons. <i>Auk</i> , 1998, 115, 916-928.	0.7	38
83	The mechanics of jumping versus steady hopping in yellow-footed rock wallabies. <i>Journal of Experimental Biology</i> , 2005, 208, 2741-2751.	0.8	38
84	In vivo muscle function vs speed I. Muscle strain in relation to length change of the muscle-tendon unit. <i>Journal of Experimental Biology</i> , 2005, 208, 1175-1190.	0.8	38
85	Kinematics and power requirements of ascending and descending flight in the pigeon (<i>Columba</i>). <i>Tj ETQq1 1 0.784314 rgBT /Overlock</i>	0.8	38
86	Multiple Phylogenetically Distinct Events Shaped the Evolution of Limb Skeletal Morphologies Associated with Bipedalism in the Jerboas. <i>Current Biology</i> , 2015, 25, 2785-2794.	1.8	38
87	In vivo muscle function vs speed II. Muscle function trotting up an incline. <i>Journal of Experimental Biology</i> , 2005, 208, 1191-1200.	0.8	36
88	Integration within and between muscles during terrestrial locomotion: effects of incline and speed. <i>Journal of Experimental Biology</i> , 2008, 211, 2303-2316.	0.8	36
89	Experimental determination of three-dimensional cervical joint mobility in the avian neck. <i>Frontiers in Zoology</i> , 2017, 14, 37.	0.9	36
90	Functional and architectural complexity within and between muscles: regional variation and intermuscular force transmission. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 1477-1487.	1.8	35

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91	Pigeons trade efficiency for stability in response to level of challenge during confined flight. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 3392-3396.	3.3	35
92	BigDog-Inspired Studies in the Locomotion of Goats and Dogs. <i>Integrative and Comparative Biology</i> , 2011, 51, 190-202.	0.9	34
93	Validation of Hill-Type Muscle Models in Relation to Neuromuscular Recruitment and Force-Velocity Properties: Predicting Patterns of In Vivo Muscle Force. <i>Integrative and Comparative Biology</i> , 2014, 54, 1072-1083.	0.9	33
94	Three-dimensional mobility and muscle attachments in the pectoral limb of the Triassic cynodont <i>Massetognathus pascuali</i> (Romer, 1967). <i>Journal of Anatomy</i> , 2018, 232, 383-406.	0.9	33
95	Muscle-specific indices to characterise the functional behaviour of human lower-limb muscles during locomotion. <i>Journal of Biomechanics</i> , 2019, 89, 134-138.	0.9	33
96	Effects of load carrying on metabolic cost and hindlimb muscle dynamics in guinea fowl (<i>Numida</i>). <i>Journal of Experimental Biology</i> , 2019, 232, 1-12.	1.2	31
97	EMG analysis tuned for determining the timing and level of activation in different motor units. <i>Journal of Electromyography and Kinesiology</i> , 2011, 21, 557-565.	0.7	31
98	Directional Differences in the Biaxial Material Properties of Fascia Lata and the Implications for Fascia Function. <i>Annals of Biomedical Engineering</i> , 2014, 42, 1224-1237.	1.3	31
99	Western and Clark's grebes use novel strategies for running on water. <i>Journal of Experimental Biology</i> , 2015, 218, 1235-1243.	0.8	31
100	Mechanics of evolutionary digit reduction in fossil horses (Equidae). <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2017, 284, 20171174.	1.2	30
101	Young wallabies get a free ride. <i>Nature</i> , 1998, 395, 653-654.	13.7	29
102	Exercise and reduced muscle mass in starlings. <i>Nature</i> , 2000, 406, 585-586.	13.7	29
103	Nature-inspired flight "beyond the leap. <i>Bioinspiration and Biomimetics</i> , 2010, 5, 040201.	1.5	28
104	Comparative hindlimb myology of foot-propelled swimming birds. <i>Journal of Anatomy</i> , 2018, 232, 105-123.	0.9	28
105	A constitutive description of the anisotropic response of the fascia lata. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 30, 306-323.	1.5	26
106	Modulation of proximal muscle function during level versus incline hopping in tammar wallabies (<i>Macropus eugenii</i>). <i>Journal of Experimental Biology</i> , 2007, 210, 1255-1265.	0.8	25
107	High-speed surface reconstruction of a flying bird using structured-light. <i>Journal of Experimental Biology</i> , 2017, 220, 1956-1961.	0.8	25
108	Modulation of joint moments and work in the goat hindlimb with locomotor speed and surface grade. <i>Journal of Experimental Biology</i> , 2013, 216, 2201-12.	0.8	24

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109	Tuning of feedforward control enables stable muscle force-length dynamics after loss of autogenic proprioceptive feedback. <i>ELife</i> , 2020, 9, .	2.8	24
110	Regulation of respiratory airflow during panting and feeding in the dog. <i>Respiration Physiology</i> , 1985, 61, 185-195.	2.8	23
111	In Vivo Bone Strain and Ontogenetic Growth Patterns in Relation to Lifeâ€History Strategies and Performance in Two Vertebrate Taxa: Goats and Emu. <i>Physiological and Biochemical Zoology</i> , 2006, 79, 57-72.	0.6	22
112	The capacity of the human iliotibial band to store elastic energy during running. <i>Journal of Biomechanics</i> , 2015, 48, 3341-3348.	0.9	21
113	Optic flow stabilizes flight in ruby-throated hummingbirds. <i>Journal of Experimental Biology</i> , 2016, 219, 2443-8.	0.8	21
114	Rules to fly by: pigeons navigating horizontal obstacles limit steering by selecting gaps most aligned to their flight direction. <i>Interface Focus</i> , 2017, 7, 20160093.	1.5	21
115	Broad similarities in shoulder muscle architecture and organization across two amniotes: implications for reconstructing non-mammalian synapsids. <i>PeerJ</i> , 2020, 8, e8556.	0.9	21
116	Pigeons (<i>C. livia</i>) Follow Their Head during Turning Flight: Head Stabilization Underlies the Visual Control of Flight. <i>Frontiers in Neuroscience</i> , 2017, 11, 655.	1.4	20
117	Evaluation of a bone's in vivo 24-hour loading history for physical exercise compared with background loading. <i>Journal of Orthopaedic Research</i> , 1998, 16, 29-37.	1.2	19
118	Recruitment of faster motor units is associated with greater rates of fascicle strain and rapid changes in muscle force during locomotion. <i>Journal of Experimental Biology</i> , 2013, 216, 198-207.	0.8	19
119	Foraging at the edge of the world: low-altitude, high-speed manoeuvring in barn swallows. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2016, 371, 20150391.	1.8	19
120	Vertical leaping mechanics of the Lesser Egyptian Jerboa reveal specialization for maneuverability rather than elastic energy storage. <i>Frontiers in Zoology</i> , 2017, 14, 32.	0.9	19
121	Variability in forelimb bone strains during non-steady locomotor activities in goats. <i>Journal of Experimental Biology</i> , 2008, 211, 1148-1162.	0.8	18
122	Biomechanics and neural control of movement, 20Âyears later: what have we learned and what has changed?. <i>Journal of NeuroEngineering and Rehabilitation</i> , 2017, 14, 91.	2.4	18
123	Scaling of the ankle extensor muscleâ€tendon units and the biomechanical implications for bipedal hopping locomotion in the postâ€pouch kangaroo <i>Macropus fuliginosus</i>. <i>Journal of Anatomy</i> , 2017, 231, 921-930.	0.9	17
124	Mechanics, modulation and modelling: how muscles actuate and control movement. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2011, 366, 1463-1465.	1.8	16
125	There is always a trade-off between speed and force in a lever system: comment on McHenry (2010). <i>Biology Letters</i> , 2011, 7, 878-879.	1.0	16
126	Scaling of the Spring in the Leg during Bouncing Gaits of Mammals. <i>Integrative and Comparative Biology</i> , 2014, 54, 1099-1108.	0.9	16

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127	Foot-propelled swimming kinematics and turning strategies in common loons. <i>Journal of Experimental Biology</i> , 2018, 221, .	0.8	16
128	Pigeons produce aerodynamic torques through changes in wing trajectory during low speed aerial turns. <i>Journal of Experimental Biology</i> , 2015, 218, 480-90.	0.8	15
129	The Evolution of a Single Toe in Horses: Causes, Consequences, and the Way Forward. <i>Integrative and Comparative Biology</i> , 2019, 59, 638-655.	0.9	15
130	Differential muscle function between muscle synergists: long and lateral heads of the triceps in jumping and landing goats (<i>Capra hircus</i>). <i>Journal of Applied Physiology</i> , 2008, 105, 1262-1273.	1.2	14
131	Flying between obstacles with an autonomous knife-edge maneuver. , 2014, , .		14
132	Mono- versus biarticular muscle function in relation to speed and gait changes: in vivo analysis of the goat triceps brachii. <i>Journal of Experimental Biology</i> , 2009, 212, 3349-3360.	0.8	13
133	The human iliotibial band is specialized for elastic energy storage compared with the chimp fascia lata. <i>Journal of Experimental Biology</i> , 2015, 218, 2382-93.	0.8	12
134	Does a two-element muscle model offer advantages when estimating ankle plantar flexor forces during human cycling?. <i>Journal of Biomechanics</i> , 2018, 68, 6-13.	0.9	12
135	Experimental Study of Low Speed Turning Flight in Cockatoos and Cockatiels. , 2007, , .		11
136	A moving topic: control and dynamics of animal locomotion. <i>Biology Letters</i> , 2010, 6, 387-388.	1.0	11
137	Metabolic cost underlies task-dependent variations in motor unit recruitment. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20180541.	1.5	11
138	In vivo force-length and activation dynamics of two distal rat hindlimb muscles in relation to gait and grade. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	11
139	Modulation of Flight Muscle Recruitment and Wing Rotation Enables Hummingbirds to Mitigate Aerial Roll Perturbations. <i>Current Biology</i> , 2020, 30, 187-195.e4.	1.8	11
140	Effect of muscle stimulation intensity on the heterogeneous function of regions within an architecturally complex muscle. <i>Journal of Applied Physiology</i> , 2021, 130, 941-951.	1.2	11
141	Fatigue alters <i>in vivo</i> function within and between limb muscles during locomotion. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2009, 276, 1193-1197.	1.2	10
142	Goats decrease hindlimb stiffness when walking over compliant surfaces. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	9
143	Added mass in rat plantaris muscle causes a reduction in mechanical work. <i>Journal of Experimental Biology</i> , 2020, 223, .	0.8	9
144	Effects of Elastic Energy Storage on Muscle Work and Efficiency. <i>Journal of Applied Biomechanics</i> , 1997, 13, 422-426.	0.3	8

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145	Skeletal Muscle Shape Change in Relation to Varying Force Requirements Across Locomotor Conditions. <i>Frontiers in Physiology</i> , 2020, 11, 143.	1.3	8
146	Walking with tyrannosaurs. <i>Nature</i> , 2002, 415, 971-973.	13.7	7
147	Aquatic and terrestrial takeoffs require different hindlimb kinematics and muscle function in mallard ducks. <i>Journal of Experimental Biology</i> , 2020, 223, .	0.8	7
148	Stability and manoeuvrability in animal movement: lessons from biology, modelling and robotics. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2022, 289, 20212492.	1.2	6
149	Functional morphology of the ankle extensor muscle-tendon units in the springhare <i>Pedetes capensis</i> shows convergent evolution with macropods for bipedal hopping locomotion. <i>Journal of Anatomy</i> , 2020, 237, 568-578.	0.9	4
150	Task-dependent recruitment across ankle extensor muscles and between mechanical demands is driven by the metabolic cost of muscle contraction. <i>Journal of the Royal Society Interface</i> , 2021, 18, 20200765.	1.5	4
151	Tired of fatigue? Factors affecting the force-length relationship of muscle. <i>Journal of Applied Physiology</i> , 2006, 101, 5-6.	1.2	3
152	Editorial policy on computational, simulation and/or robotic papers. <i>Journal of Experimental Biology</i> , 2012, 215, 4051-4051.	0.8	3
153	Post-activation muscle potentiation and its relevance to cyclical behaviours. <i>Biology Letters</i> , 2020, 16, 20200255.	1.0	3
154	Lower-limb muscle function is influenced by changing mechanical demands in cycling. <i>Journal of Experimental Biology</i> , 2021, 224, .	0.8	3
155	The mechanics of horse locomotion: Strains developed in the limb bones at different gaits. <i>Journal of Biomechanics</i> , 1981, 14, 487.	0.9	2
156	Getting to grips with how birds land stably on complex surfaces. <i>Nature</i> , 2019, 574, 180-181.	13.7	2
157	Experimental alteration of limb posture in the chicken (<i>Gallus gallus</i>) and its bearing on the use of birds as analogs for dinosaur locomotion. , 1999, 240, 237.		2
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