Andrew A Biewener

List of Publications by Citations

155 papers	9,115 citations	53 h-index	91 g-index
176 ext. papers	10,336 ext. citations	6.4 avg, IF	6.49 L-index

#	Paper	IF	Citations
155	Scaling body support in mammals: limb posture and muscle mechanics. *Science*, **1989**, 245, 45-8	33.3	620
154	Biomechanics of mammalian terrestrial locomotion. *Science*, **1990**, 250, 1097-103	33.3	417
153	Bipedal locomotion: effects of speed, size and limb posture in birds and humans. *Journal of Zoology* , **1991**, 224, 127-147	2	324
152	Adaptive changes in trabecular architecture in relation to functional strain patterns and disuse. *Bone*, **1996**, 19, 1-8	4.7	298
151	Energetics and mechanics of human running on surfaces of different stiffnesses. *Journal of Applied Physiology*, **2002**, 92, 469-78	3.7	250
150	Biomechanical consequences of scaling. *Journal of Experimental Biology*, **2005**, 208, 1665-76	3	236
149	Bone stress in the horse forelimb during locomotion at different gaits: a comparison of two experimental methods. *Journal of Biomechanics*, **1983**, 16, 565-76	2.9	203
148	Muscle mechanical advantage of human walking and running: implications for energy cost. *Journal of Applied Physiology*, **2004**, 97, 2266-74	3.7	192
147	Bone curvature: sacrificing strength for load predictability?. *Journal of Theoretical Biology*, **1988**, 131, 75-92	2.3	190
146	Muscle-tendon stresses and elastic energy storage during locomotion in the horse. *Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology*, **1998**, 120, 73-87	2.3	182
145	Comparative power curves in bird flight. *Nature*, **2003**, 421, 363-6	50.4	174
144	Neuromechanics: an integrative approach for understanding motor control. *Integrative and Comparative Biology*, **2007**, 47, 16-54	2.8	164
143	Differential scaling of the long bones in the terrestrial carnivora and other mammals. *Journal of Morphology*, **1990**, 204, 157-69	1.6	161
142	Musculoskeletal design in relation to body size. *Journal of Biomechanics*, **1991**, 24 Suppl 1, 19-29	2.9	158
141	Three-dimensional kinematics of hummingbird flight. *Journal of Experimental Biology*, **2007**, 210, 2368-82	3	154
140	Running over rough terrain reveals limb control for intrinsic stability. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 15681-6	11.5	152
139	Muscle force-length dynamics during level versus incline locomotion: a comparison of in vivo performance of two guinea fowl ankle extensors. *Journal of Experimental Biology*, **2003**, 206, 2941-58	3	152

138	Bone modeling during growth: dynamic strain equilibrium in the chick tibiotarsus. *Calcified Tissue International*, **1986**, 39, 390-5	3.9	141
137	Hindlimb muscle function in relation to speed and gait:in vivopatterns of strain and activation in a hip and knee extensor of the rat (Rattus norvegicus). *Journal of Experimental Biology*, **2001**, 204, 2717-2731	3	131
136	Unsteady locomotion: integrating muscle function with whole body dynamics and neuromuscular control. *Journal of Experimental Biology*, **2007**, 210, 2949-60	3	123
135	Muscle Functionin vivo: A Comparison of Muscles used for Elastic Energy SavingsversusMuscles Used to Generate Mechanical Power1. *American Zoologist*, **1998**, 38, 703-717		120
134	Structural response of growing bone to exercise and disuse. *Journal of Applied Physiology*, **1994**, 76, 946-55	3.7	118
133	Safety factors in bone strength. *Calcified Tissue International*, **1993**, 53 Suppl 1, S68-74	3.9	116
132	Running over rough terrain: guinea fowl maintain dynamic stability despite a large unexpected change in substrate height. *Journal of Experimental Biology*, **2006**, 209, 171-87	3	113
131	Mechanical power output of bird flight. *Nature*, **1997**, 390, 67-70	50.4	112
130	Kinematic and Electromyographic Analysis of the functional role of the body axis during Terrestrial and Aquatic Locomotion in the Salamander Ambystoma Tigrinum. *Journal of Experimental Biology*, **1992**, 162, 107-130	3	111
129	Mammalian Terrestrial Locomotion and Size. *BioScience*, **1989**, 39, 776-783	5.7	100
128	In vivo strain in the humerus of pigeons (Columba livia) during flight. *Journal of Morphology*, **1995**, 225, 61-75	1.6	96
127	Telemetered in vivo strain analysis of locomotor mechanics of brachiating gibbons. *Nature*, **1989**, 342, 270-2	50.4	96
126	Estimates of circulation and gait change based on a three-dimensional kinematic analysis of flight in cockatiels (Nymphicus hollandicus)and ringed turtle-doves (Streptopelia risoria). *Journal of Experimental Biology*, **2002**, 205, 1389-1409	3	93
125	Walking and running in the red-legged running frog, Kassina maculata. *Journal of Experimental Biology*, **2004**, 207, 399-410	3	91
124	Wing inertia and whole-body acceleration: an analysis of instantaneous aerodynamic force production in cockatiels (Nymphicus hollandicus) flying across a range of speeds. *Journal of Experimental Biology*, **2004**, 207, 1689-702	3	88
123	Mechanics of locomotion and jumping in the horse (Equus): in vivo stress in the tibia and metatarsus. *Journal of Zoology*, **1988**, 214, 547-565	2	76
122	Skeletal strain patterns and growth in the emu hindlimb during ontogeny. *Journal of Experimental Biology*, **2007**, 210, 2676-90	3	69
121	In vivo and in vitro heterogeneity of segment length changes in the semimembranosus muscle of the toad. *Journal of Physiology*, **2003**, 549, 877-88	3.9	69

120	How cockatiels (Nymphicus hollandicus) modulate pectoralis power output across flight speeds. *Journal of Experimental Biology*, **2003**, 206, 1363-78	3	68
119	Effects of surface grade on proximal hindlimb muscle strain and activation during rat locomotion. *Journal of Applied Physiology*, **2002**, 93, 1731-43	3.7	67
118	Ontogenetic patterns of limb loading, in vivo bone strains and growth in the goat radius. *Journal of Experimental Biology*, **2004**, 207, 2577-88	3	66
117	Patterns of mechanical energy change in tetrapod gait: pendula, springs and work. *Journal of Experimental Zoology Part A, Comparative Experimental Biology*, **2006**, 305, 899-911		65
116	Wing and body kinematics of takeoff and landing flight in the pigeon (Columba livia). *Journal of Experimental Biology*, **2010**, 213, 1651-8	3	64
115	Dynamics of leg muscle function in tammar wallabies (M. eugenii) during level versus incline hopping. *Journal of Experimental Biology*, **2004**, 207, 211-23	3	63
114	Experimental alteration of limb posture in the chicken (Gallus gallus) and its bearing on the use of birds as analogs for dinosaur locomotion. *Journal of Morphology*, **1999**, 240, 237-49	1.6	63
113	The role of intrinsic muscle mechanics in the neuromuscular control of stable running in the guinea fowl. *Journal of Physiology*, **2009**, 587, 2693-707	3.9	61
112	Functional diversification within and between muscle synergists during locomotion. *Biology Letters*, **2008**, 4, 41-4	3.6	60
111	Low speed maneuvering flight of the rose-breasted cockatoo (Eolophus roseicapillus). I. Kinematic and neuromuscular control of turning. *Journal of Experimental Biology*, **2007**, 210, 1897-911	3	59
110	Dynamic pressure maps for wings and tails of pigeons in slow, flapping flight, and their energetic implications. *Journal of Experimental Biology*, **2005**, 208, 355-69	3	58
109	Muscle function in avian flight: achieving power and control. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2011**, 366, 1496-506	5.8	57
108	PECTORALIS MUSCLE FORCE AND POWER OUTPUT DURING FLIGHT IN THE STARLING. *Journal of Experimental Biology*, **1992**, 164, 1-18	3	56
107	Negotiating obstacles: running kinematics of the lizard Sceloporus malachiticus. *Journal of Zoology*, **2006**, 270, 359-371	2	55
106	Leg muscles that mediate stability: mechanics and control of two distal extensor muscles during obstacle negotiation in the guinea fowl. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2011**, 366, 1580-91	5.8	54
105	Wing kinematics of avian flight across speeds. *Journal of Avian Biology*, **2003**, 34, 177-184	1.9	54
104	Allometry and curvature in the long bones of quadrupedal mammals. *Journal of Zoology*, **1992**, 226, 455-467	2	54
103	Pigeons steer like helicopters and generate down- and upstroke lift during low speed turns. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 19990-5	11.5	53

102	Hind limb scaling of kangaroos and wallabies (superfamily Macropodoidea): implications for hopping performance, safety factor and elastic savings. *Journal of Anatomy*, **2008**, 212, 153-63	2.9	52
101	Estimates of circulation and gait change based on a three-dimensional kinematic analysis of flight in cockatiels (Nymphicus hollandicus) and ringed turtle-doves (Streptopelia risoria). *Journal of Experimental Biology*, **2002**, 205, 1389-409	3	52
100	Outrun or Outmaneuver: Predator-Prey Interactions as a Model System for Integrating Biomechanical Studies in a Broader Ecological and Evolutionary Context. *Integrative and Comparative Biology*, **2015**, 55, 1188-97	2.8	50
99	Animal Locomotion **2018**,		49
98	Contractile properties of the pigeon supracoracoideus during different modes of flight. *Journal of Experimental Biology*, **2008**, 211, 170-9	3	47
97	Patterns of strain and activation in the thigh muscles of goats across gaits during level locomotion. *Journal of Experimental Biology*, **2005**, 208, 4599-611	3	45
96	A collisional perspective on quadrupedal gait dynamics. *Journal of the Royal Society Interface*, **2011**, 8, 1480-6	4.1	44
95	Joint work and power associated with acceleration and deceleration in tammar wallabies (Macropus eugenii). *Journal of Experimental Biology*, **2005**, 208, 41-53	3	44
94	A muscleЂs force depends on the recruitment patterns of its fibers. *Annals of Biomedical Engineering* , **2012**, 40, 1708-20	4.7	42
93	Morphological and kinematic basis of the hummingbird flight stroke: scaling of flight muscle transmission ratio. *Proceedings of the Royal Society B: Biological Sciences*, **2012**, 279, 1986-92	4.4	41
92	Comparison of human gastrocnemius forces predicted by Hill-type muscle models and estimated from ultrasound images. *Journal of Experimental Biology*, **2017**, 220, 1643-1653	3	40
91	Locomotion as an emergent property of muscle contractile dynamics. *Journal of Experimental Biology*, **2016**, 219, 285-94	3	38
90	Compliance, actuation, and work characteristics of the goat foreleg and hindleg during level, uphill, and downhill running. *Journal of Applied Physiology*, **2008**, 104, 130-41	3.7	37
89	Low speed maneuvering flight of the rose-breasted cockatoo (Eolophus roseicapillus). II. Inertial and aerodynamic reorientation. *Journal of Experimental Biology*, **2007**, 210, 1912-24	3	37
88	Future directions for the analysis of musculoskeletal design and locomotor performance. *Journal of Morphology*, **2002**, 252, 38-51	1.6	37
87	Through the eyes of a bird: modelling visually guided obstacle flight. *Journal of the Royal Society Interface*, **2014**, 11, 20140239	4.1	36
86	Unpredictability of escape trajectory explains predator evasion ability and microhabitat preference of desert rodents. *Nature Communications*, **2017**, 8, 440	17.4	36
85	Kinematics and power requirements of ascending and descending flight in the pigeon (Columba livia). *Journal of Experimental Biology*, **2008**, 211, 1120-30	3	34

84	Integration within and between muscles during terrestrial locomotion: effects of incline and speed. *Journal of Experimental Biology*, **2008**, 211, 2303-16	3	34
83	The aerodynamics of avian take-off from direct pressure measurements in Canada geese (Branta canadensis). *Journal of Experimental Biology*, **2003**, 206, 4051-6	3	34
82	The mechanics of jumping versus steady hopping in yellow-footed rock wallabies. *Journal of Experimental Biology*, **2005**, 208, 2741-51	3	34
81	Regional patterns of pectoralis fascicle strain in the pigeon Columba livia during level flight. *Journal of Experimental Biology*, **2005**, 208, 771-86	3	34
80	Multiple phylogenetically distinct events shaped the evolution of limb skeletal morphologies associated with bipedalism in the jerboas. *Current Biology*, **2015**, 25, 2785-2794	6.3	33
79	Hummingbird flight stability and control in freestream turbulent winds. *Journal of Experimental Biology*, **2015**, 218, 1444-52	3	33
78	Dynamics of goat distal hind limb muscle-tendon function in response to locomotor grade. *Journal of Experimental Biology*, **2009**, 212, 2092-104	3	33
77	In vivo muscle function vs speed. II. Muscle function trotting up an incline. *Journal of Experimental Biology*, **2005**, 208, 1191-200	3	33
76	Asymmetrical Force Production in the Maneuvering Flight of Pigeons. *Auk*, **1998**, 115, 916-928	2.1	33
75	The functional morphology of xenarthrous vertebrae in the armadillo Dasypus novemcinctus (Mammalia, Xenarthra). *Journal of Morphology*, **1992**, 214, 63-81	1.6	32
74	In vivo muscle function vs speed. I. Muscle strain in relation to length change of the muscle-tendon unit. *Journal of Experimental Biology*, **2005**, 208, 1175-90	3	31
73	Accuracy of gastrocnemius muscles forces in walking and running goats predicted by one-element and two-element Hill-type models. *Journal of Biomechanics*, **2013**, 46, 2288-95	2.9	29
72	The effect of fast and slow motor unit activation on whole-muscle mechanical performance: the size principle may not pose a mechanical paradox. *Proceedings of the Royal Society B: Biological Sciences*, **2014**, 281, 20140002	4.4	29
71	Modulation of in vivo muscle power output during swimming in the African clawed frog (Xenopus laevis). *Journal of Experimental Biology*, **2007**, 210, 3147-59	3	29
70	Effects of load carrying on metabolic cost and hindlimb muscle dynamics in guinea fowl (Numida meleagris). *Journal of Applied Physiology*, **2006**, 101, 1060-9	3.7	29
69	Effects of flight speed upon muscle activity in hummingbirds. *Journal of Experimental Biology*, **2010**, 213, 2515-23	3	28
68	Functional and architectural complexity within and between muscles: regional variation and intermuscular force transmission. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2011**, 366, 1477-87	5.8	28
67	Validation of Hill-type muscle models in relation to neuromuscular recruitment and force-velocity properties: predicting patterns of in vivo muscle force. *Integrative and Comparative Biology*, **2014**, 54, 1072-83	2.8	27

66	Exercise and reduced muscle mass in starlings. *Nature*, **2000**, 406, 585-6	50.4	27
65	BigDog-inspired studies in the locomotion of goats and dogs. *Integrative and Comparative Biology*, **2011**, 51, 190-202	2.8	26
64	Directional differences in the biaxial material properties of fascia lata and the implications for fascia function. *Annals of Biomedical Engineering*, **2014**, 42, 1224-37	4.7	25
63	Hummingbird flight. *Current Biology*, **2012**, 22, R472-7	6.3	25
62	Muscle function during takeoff and landing flight in the pigeon (Columba livia). *Journal of Experimental Biology*, **2012**, 215, 4104-14	3	25
61	EMG analysis tuned for determining the timing and level of activation in different motor units. *Journal of Electromyography and Kinesiology*, **2011**, 21, 557-65	2.5	24
60	Young wallabies get a free ride. *Nature*, **1998**, 395, 653-654	50.4	23
59	Pigeons trade efficiency for stability in response to level of challenge during confined flight. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 3392-6	11.5	22
58	Mechanics of evolutionary digit reduction in fossil horses (Equidae). *Proceedings of the Royal Society B: Biological Sciences*, **2017**, 284,	4.4	22
57	Modulation of proximal muscle function during level versus incline hopping in tammar wallabies (Macropus eugenii). *Journal of Experimental Biology*, **2007**, 210, 1255-65	3	22
56	Regulation of respiratory airflow during panting and feeding in the dog. *Respiration Physiology*, **1985**, 61, 185-95		22
55	In vivo bone strain and ontogenetic growth patterns in relation to life-history strategies and performance in two vertebrate taxa: goats and emu. *Physiological and Biochemical Zoology*, **2006**, 79, 57-72	2	21
54	A constitutive description of the anisotropic response of the fascia lata. *Journal of the Mechanical Behavior of Biomedical Materials*, **2014**, 30, 306-23	4.1	20
53	Western and Clarkʼs grebes use novel strategies for running on water. *Journal of Experimental Biology*, **2015**, 218, 1235-43	3	19
52	Modulation of joint moments and work in the goat hindlimb with locomotor speed and surface grade. *Journal of Experimental Biology*, **2013**, 216, 2201-12	3	19
51	Recruitment of faster motor units is associated with greater rates of fascicle strain and rapid changes in muscle force during locomotion. *Journal of Experimental Biology*, **2013**, 216, 198-207	3	19
50	High-speed surface reconstruction of a flying bird using structured light. *Journal of Experimental Biology*, **2017**, 220, 1956-1961	3	18
49	Evaluation of a boneʼs in vivo 24-hour loading history for physical exercise compared with background loading. *Journal of Orthopaedic Research*, **1998**, 16, 29-37	3.8	18

48	Three-dimensional mobility and muscle attachments in the pectoral limb of the Triassic cynodont Massetognathus pascuali (Romer, 1967). *Journal of Anatomy*, **2018**, 232, 383-406	2.9	17
47	Experimental determination of three-dimensional cervical joint mobility in the avian neck. *Frontiers in Zoology*, **2017**, 14, 37	2.8	17
46	Comparative hindlimb myology of foot-propelled swimming birds. *Journal of Anatomy*, **2018**, 232, 105-123	2.9	17
45	Muscle-specific indices to characterise the functional behaviour of human lower-limb muscles during locomotion. *Journal of Biomechanics*, **2019**, 89, 134-138	2.9	16
44	Optic flow stabilizes flight in ruby-throated hummingbirds. *Journal of Experimental Biology*, **2016**, 219, 2443-8	3	16
43	Variability in forelimb bone strains during non-steady locomotor activities in goats. *Journal of Experimental Biology*, **2008**, 211, 1148-62	3	16
42	Foraging at the edge of the world: low-altitude, high-speed manoeuvering in barn swallows. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2016**, 371,	5.8	15
41	The capacity of the human iliotibial band to store elastic energy during running. *Journal of Biomechanics*, **2015**, 48, 3341-8	2.9	14
40	Pigeons produce aerodynamic torques through changes in wing trajectory during low speed aerial turns. *Journal of Experimental Biology*, **2015**, 218, 480-90	3	14
39	Differential muscle function between muscle synergists: long and lateral heads of the triceps in jumping and landing goats (Capra hircus). *Journal of Applied Physiology*, **2008**, 105, 1262-73	3.7	14
38	Rules to fly by: pigeons navigating horizontal obstacles limit steering by selecting gaps most aligned to their flight direction. *Interface Focus*, **2017**, 7, 20160093	3.9	13
37	Vertical leaping mechanics of the Lesser Egyptian Jerboa reveal specialization for maneuverability rather than elastic energy storage. *Frontiers in Zoology*, **2017**, 14, 32	2.8	13
36	Scaling of the ankle extensor muscle-tendon units and the biomechanical implications for bipedal hopping locomotion in the post-pouch kangaroo Macropus fuliginosus. *Journal of Anatomy*, **2017**, 231, 921-930	2.9	11
35	Scaling of the spring in the leg during bouncing gaits of mammals. *Integrative and Comparative Biology*, **2014**, 54, 1099-108	2.8	11
34	Mono- versus biarticular muscle function in relation to speed and gait changes: in vivo analysis of the goat triceps brachii. *Journal of Experimental Biology*, **2009**, 212, 3349-60	3	11
33	There is always a trade-off between speed and force in a lever system: comment on McHenry (2010). *Biology Letters*, **2011**, 7, 878-9; discussion 880-1	3.6	11
32	Experimental Study of Low Speed Turning Flight in Cockatoos and Cockatiels **2007**,		11
31	Broad similarities in shoulder muscle architecture and organization across two amniotes: implications for reconstructing non-mammalian synapsids. *PeerJ*, **2020**, 8, e8556	3.1	11

30	Biomechanics and neural control of movement, 20 years later: what have we learned and what has changed?. *Journal of NeuroEngineering and Rehabilitation*, **2017**, 14, 91	5.3	10
29	Does a two-element muscle model offer advantages when estimating ankle plantar flexor forces during human cycling?. *Journal of Biomechanics*, **2018**, 68, 6-13	2.9	10
28	Flying between obstacles with an autonomous knife-edge maneuver **2014**,		10
27	A moving topic: control and dynamics of animal locomotion. *Biology Letters*, **2010**, 6, 387-8	3.6	9
26	Fatigue alters in vivo function within and between limb muscles during locomotion. *Proceedings of the Royal Society B: Biological Sciences*, **2009**, 276, 1193-7	4.4	9
25	Tuning of feedforward control enables stable muscle force-length dynamics after loss of autogenic proprioceptive feedback. *ELife*, **2020**, 9,	8.9	9
24	Foot-propelled swimming kinematics and turning strategies in common loons. *Journal of Experimental Biology*, **2018**, 221,	3	8
23	Mechanics, modulation and modelling: how muscles actuate and control movement. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2011**, 366, 1463-5	5.8	8
22	Pigeons () Follow Their Head during Turning Flight: Head Stabilization Underlies the Visual Control of Flight. *Frontiers in Neuroscience*, **2017**, 11, 655	5.1	7
21	force-length and activation dynamics of two distal rat hindlimb muscles in relation to gait and grade. *Journal of Experimental Biology*, **2019**, 222,	3	7
20	The human iliotibial band is specialized for elastic energy storage compared with the chimp fascia lata. *Journal of Experimental Biology*, **2015**, 218, 2382-93	3	6
19	Effects of Elastic Energy Storage on Muscle Work and Efficiency. *Journal of Applied Biomechanics*, **1997**, 13, 422-426	1.2	6
18	Metabolic cost underlies task-dependent variations in motor unit recruitment. *Journal of the Royal Society Interface*, **2018**, 15,	4.1	6
17	The Evolution of a Single Toe in Horses: Causes, Consequences, and the Way Forward. *Integrative and Comparative Biology*, **2019**, 59, 638-655	2.8	5
16	Effect of muscle stimulation intensity on the heterogeneous function of regions within an architecturally complex muscle. *Journal of Applied Physiology*, **2021**, 130, 941-951	3.7	5
15	Goats decrease hindlimb stiffness when walking over compliant surfaces. *Journal of Experimental Biology*, **2019**, 222,	3	4
14	Added mass in rat plantaris muscle causes a reduction in mechanical work. *Journal of Experimental Biology*, **2020**, 223,	3	4
13	Skeletal Muscle Shape Change in Relation to Varying Force Requirements Across Locomotor Conditions. *Frontiers in Physiology*, **2020**, 11, 143	4.6	4

12	Post-activation muscle potentiation and its relevance to cyclical behaviours. *Biology Letters*, **2020**, 16, 20200255	3.6	3
11	Modulation of Flight Muscle Recruitment and Wing Rotation Enables Hummingbirds to Mitigate Aerial Roll Perturbations. *Current Biology*, **2020**, 30, 187-195.e4	6.3	3
10	The mechanics of horse locomotion: Strains developed in the limb bones at different gaits. *Journal of Biomechanics*, **1981**, 14, 487	2.9	2
9	Experimental alteration of limb posture in the chicken (Gallus gallus) and its bearing on the use of birds as analogs for dinosaur locomotion **1999**, 240, 237		2
8	Functional morphology of the ankle extensor muscle-tendon units in the springhare Pedetes capensis shows convergent evolution with macropods for bipedal hopping locomotion. *Journal of Anatomy*, **2020**, 237, 568-578	2.9	1
7	Tired of fatigue? Factors affecting the force-length relationship of muscle. *Journal of Applied Physiology*, **2006**, 101, 5-6	3.7	1
6	Lower-limb muscle function is influenced by changing mechanical demands in cycling. *Journal of Experimental Biology*, **2021**, 224,	3	1
5	Task-dependent recruitment across ankle extensor muscles and between mechanical demands is driven by the metabolic cost of muscle contraction. *Journal of the Royal Society Interface*, **2021**, 18, 20200765	4.1	1
4	Animal Locomotion: Near-Ground Low-Cost Flights. *Current Biology*, **2018**, 28, R1348-R1349	6.3	1
3	Experimental alteration of limb posture in the chicken (Gallus gallus) and its bearing on the use of birds as analogs for dinosaur locomotion **1999**, 240, 237		1
2	Evolutionary race as predators hunt prey. *Nature*, **2018**, 554, 176-178	50.4	
1	R. McNeill Alexander (1934-2016). *Nature*, **2016**, 532, 442	50.4	