John R Hutchinson

List of Publications by Year
in descending order

172	11,331	44069	46799
papers	citations	48	89
		h-index	g-index

197	197	197	12844
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Limb proportions show developmental plasticity in response to embryo movement. Scientific Reports, 2017, 7, 41926.	3.3	1,989
2	BoneJ: Free and extensible bone image analysis in ImageJ. Bone, 2010, 47, 1076-1079.	2.9	1,695
3	Pelvic and hindlimb musculature ofTyrannosaurus rex (Dinosauria: Theropoda). Journal of Morphology, 2002, 253, 207-228.	1.2	213
4	The evolution of femoral osteology and soft tissues on the line to extant birds (Neornithes). Zoological Journal of the Linnean Society, 2001, 131, 169-197.	2.3	210
5	The evolution of pelvic osteology and soft tissues on the line to extant birds (Neornithes). Zoological Journal of the Linnean Society, 2001, 131, 123-168.	2.3	198
6	Adductors, abductors, and the evolution of archosaur locomotion. Paleobiology, 2000, 26, 734-751.	2.0	174
7	Three-dimensional limb joint mobility in the early tetrapod Ichthyostega. Nature, 2012, 486, 523-526.	27.8	171
8	Tyrannosaurus was not a fast runner. Nature, 2002, 415, 1018-1021.	27.8	169
9	Reverse-engineering the locomotion of a stem amniote. Nature, 2019, 565, 351-355.	27.8	165
10	Analysis of hindlimb muscle moment arms in Tyrannosaurus rex using a three-dimensional musculoskeletal computer model: implications for stance, gait, and speed. Paleobiology, 2005, 31, 676.	2.0	163
11	Tyrannosaur Paleobiology: New Research on Ancient Exemplar Organisms. Science, 2010, 329, 1481-1485.	12.6	152
12	Linking the evolution of body shape and locomotor biomechanics in bird-line archosaurs. Nature, 2013, 497, 104-107.	27.8	146
13	Functional specialisation of pelvic limb anatomy in horses (Equus caballus). Journal of Anatomy, 2005, 206, 557-574.	1.5	140
14	Some basic relationships between density values in cancellous and cortical bone. Journal of Biomechanics, 2008, 41, 1961-1968.	2.1	137
15	The locomotor kinematics of Asian and African elephants: changes with speed and size. Journal of Experimental Biology, 2006, 209, 3812-3827.	1.7	124
16	The evolutionary continuum of limb function from early theropods to birds. Die Naturwissenschaften, 2009, 96, 423-448.	1.6	124
17	The evolution of hindlimb tendons and muscles on the line to crown-group birds. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2002, 133, 1051-1086.	1.8	123
18	Are fast-moving elephants really running?. Nature, 2003, 422, 493-494.	27.8	115

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19	Trabecular bone scales allometrically in mammals and birds. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3067-3073.	2.6	114
20	Biomechanical modeling and sensitivity analysis of bipedal running ability. I. Extant taxa. Journal of Morphology, 2004, 262, 421-440.	1.2	111
21	Musculoskeletal modelling of an ostrich (Struthio camelus) pelvic limb: influence of limb orientation on muscular capacity during locomotion. PeerJ, 2015, 3, e1001.	2.0	111
22	A Computational Analysis of Limb and Body Dimensions in Tyrannosaurus rex with Implications for Locomotion, Ontogeny, and Growth. PLoS ONE, 2011, 6, e26037.	2.5	104
23	Open data and digital morphology. Proceedings of the Royal Society B: Biological Sciences, 2017, 284, 20170194.	2.6	103
24	Musculoskeletal Geometry, Muscle Architecture and Functional Specialisations of the Mouse Hindlimb. PLoS ONE, 2016, 11, e0147669.	2.5	100
25	The structure of the cushions in the feet of African elephants (Loxodonta africana). Journal of Anatomy, 2006, 209, 781-792.	1.5	96
26	Biomechanical modeling and sensitivity analysis of bipedal running ability. II. Extinct taxa. Journal of Morphology, 2004, 262, 441-461.	1.2	92
27	Inferring muscle functional roles of the ostrich pelvic limb during walking and running using computer optimization. Journal of the Royal Society Interface, 2016, 13, 20160035.	3.4	92
28	Comparative axial morphology in pinnipeds and its correlation with aquatic locomotory behaviour. Journal of Anatomy, 2011, 219, 502-514.	1.5	91
29	Muscle moment arms and sensitivity analysis of a mouse hindlimb musculoskeletal model. Journal of Anatomy, 2016, 229, 514-535.	1.5	91
30	Phylogenetic definitions and nomenclature of the major taxonomic categories of the carnivorous Dinosauria (Theropoda). Journal of Vertebrate Paleontology, 1999, 19, 69-80.	1.0	87
31	Scaling of sensorimotor control in terrestrial mammals. Proceedings of the Royal Society B: Biological Sciences, 2010, 277, 3563-3568.	2.6	87
32	A 3D interactive method for estimating body segmental parameters in animals: Application to the turning and running performance of Tyrannosaurus rex. Journal of Theoretical Biology, 2007, 246, 660-680.	1.7	81
33	Constraint-based exclusion of limb poses for reconstructing theropod dinosaur locomotion. Journal of Vertebrate Paleontology, 2009, 29, 535-544.	1.0	77
34	Functional specialization and ontogenetic scaling of limb anatomy in Alligator mississippiensis. Journal of Anatomy, 2010, 216, 423-445.	1.5	74
35	Theropod Locomotion1. American Zoologist, 2000, 40, 640-663.	0.7	73
36	The evolution ofÂlocomotion inÂarchosaurs. Comptes Rendus - Palevol, 2006, 5, 519-530.	0.2	73

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37	Topsy-turvy locomotion: biomechanical specializations of the elbow in suspended quadrupeds reflect inverted gravitational constraints. Journal of Anatomy, 2011, 219, 176-191.	1.5	72
38	How to build a dinosaur: Musculoskeletal modeling and simulation of locomotor biomechanics in extinct animals. Paleobiology, 2021, 47, 1-38.	2.0	66
39	Variation in Center of Mass Estimates for Extant Sauropsids and its Importance for Reconstructing Inertial Properties of Extinct Archosaurs. Anatomical Record, 2009, 292, 1442-1461.	1.4	63
40	Beyond the bones. Nature, 2006, 440, 292-294.	27.8	61
41	Forelimb muscle and joint actions in Archosauria: insights fromCrocodylus johnstoni(Pseudosuchia) andMussaurus patagonicus(Sauropodomorpha). PeerJ, 2017, 5, e3976.	2.0	61
42	Comparative architectural properties of limb muscles in <scp>C</scp>rocodylidae and <scp>A</scp>lligatoridae and their relevance to divergent use of asymmetrical gaits in extant <scp>C</scp>rocodylia. Journal of Anatomy, 2014, 225, 569-582.	1.5	58
43	Historical Perspectives on the Evolution of Tetrapodomorph Movement. Integrative and Comparative Biology, 2013, 53, 209-223.	2.0	57
44	From Flat Foot to Fat Foot: Structure, Ontogeny, Function, and Evolution of Elephant â€œSixth Toesâ€. Science, 2011, 334, 1699-1703.	12.6	55
45	On the inference of function from structure using biomechanical modelling and simulation of extinct organisms. Biology Letters, 2012, 8, 115-118.	2.3	55
46	Pulmonary anatomy in the Nile crocodile and the evolution of unidirectional airflow in Archosauria. PeerJ, 2013, 1, e60.	2.0	55
47	Energy allocation and behaviour in the growing broiler chicken. Scientific Reports, 2018, 8, 4562.	3.3	55
48	New information onSegisaurus halli, a small theropod dinosaur from the Early Jurassic of Arizona. Journal of Vertebrate Paleontology, 2005, 25, 835-849.	1.0	53
49	Three-Dimensional Geometric Analysis of Felid Limb Bone Allometry. PLoS ONE, 2009, 4, e4742.	2.5	53
50	Integration of biomechanical compliance, leverage, and power in elephant limbs. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7078-7082.	7.1	53
51	The movements of limb segments and joints during locomotion in African and Asian elephants. Journal of Experimental Biology, 2008, 211, 2735-2751.	1.7	52
52	The three-dimensional locomotor dynamics of African (Loxodonta africana) and Asian (Elephas) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 1 Interface, 2008, 5, 195-211.	3.4	51
53	Vertebral architecture in the earliest stem tetrapods. Nature, 2013, 494, 226-229.	27.8	51
54	Morphological and functional changes in the vertebral column with increasing aquatic adaptation in crocodylomorphs. Royal Society Open Science, 2015, 2, 150439.	2.4	51

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55	Temporal and phylogenetic evolution of the sauropod dinosaur body plan. Royal Society Open Science, 2016, 3, 150636.	2.4	51
56	Biomechanics of Running Indicates Endothermy in Bipedal Dinosaurs. PLoS ONE, 2009, 4, e7783.	2.5	49
57	Ontogenetic changes in the body plan of the sauropodomorph dinosaur Mussaurus patagonicus reveal shifts of locomotor stance during growth. Scientific Reports, 2019, 9, 7614.	3.3	48
58	A Dynamic Finite Element Analysis of Human Foot Complex in the Sagittal Plane during Level Walking. PLoS ONE, 2013, 8, e79424.	2.5	47
59	An experimental and morphometric test of the relationship between vertebral morphology and joint stiffness in Nile crocodiles (Crocodylus niloticus). Journal of Experimental Biology, 2014, 217, 758-768.	1.7	47
60	Are mice good models for human neuromuscular disease? Comparing muscle excursions in walking between mice and humans. Skeletal Muscle, 2017, 7, 26.	4.2	47
61	The effects of selective breeding on the architectural properties of the pelvic limb in broiler chickens: a comparative study across modern and ancestral populations. Journal of Anatomy, 2010, 217, 153-166.	1.5	45
62	Biomechanical evolution of solid bones in large animals: a microanatomical investigation. Biological Journal of the Linnean Society, 2016, 117, 350-371.	1.6	44
63	Ontogenetic scaling of foot musculoskeletal anatomy in elephants. Journal of the Royal Society Interface, 2008, 5, 465-475.	3.4	43
64	Secondary osteons scale allometrically in mammalian humerus and femur. Royal Society Open Science, 2017, 4, 170431.	2.4	43
65	Cryptic complexity in felid vertebral evolution: shape differentiation and allometry of the axial skeleton. Zoological Journal of the Linnean Society, 2016, 178, 183-202.	2.3	42
66	The gait dynamics of the modern broiler chicken: A cautionary tale of selective breeding. Journal of Experimental Biology, 2013, 216, 3237-48.	1.7	41
67	Anatomical and biomechanical traits of broiler chickens across ontogeny. Part I. Anatomy of the musculoskeletal respiratory apparatus and changes in organ size. PeerJ, 2014, 2, e432.	2.0	41
68	Wholeâ€bone scaling of the avian pelvic limb. Journal of Anatomy, 2012, 221, 21-29.	1.5	39
69	Evolution of the patellar sesamoid bone in mammals. PeerJ, 2017, 5, e3103.	2.0	39
70	The first known alvarezsaurid (Theropoda: Aves) from North America. Journal of Vertebrate Paleontology, 1998, 18, 447-450.	1.0	38
71	The scaling of postcranial muscles in cats (Felidae) I: forelimb, cervical, and thoracic muscles. Journal of Anatomy, 2016, 229, 128-141.	1.5	38
72	3D hindlimb joint mobility of the stem-archosaur Euparkeria capensis with implications for postural evolution within Archosauria. Scientific Reports, 2020, 10, 15357.	3.3	37

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73	Statistical parametric mapping of the regional distribution and ontogenetic scaling of foot pressures during walking in Asian elephants (Elephas maximus). Journal of Experimental Biology, 2012, 215, 1584-1593.	1.7	36
74	Anatomical and biomechanical traits of broiler chickens across ontogeny. Part II. Body segment inertial properties and muscle architecture of the pelvic limb. PeerJ, 2014, 2, e473.	2.0	35
75	Reconstructing pectoral appendicular muscle anatomy in fossil fish and tetrapods over the finsâ€toâ€limbs transition. Biological Reviews, 2018, 93, 1077-1107.	10.4	34
76	Ontogenetic scaling patterns and functional anatomy of the pelvic limb musculature in emus (Dromaius novaehollandiae). PeerJ, 2014, 2, e716.	2.0	34
77	A Dynamic Simulation of Musculoskeletal Function in the Mouse Hindlimb During Trotting Locomotion. Frontiers in Bioengineering and Biotechnology, 2018, 6, 61.	4.1	33
78	Shake a Tail Feather: The Evolution of the Theropod Tail into a Stiff Aerodynamic Surface. PLoS ONE, 2013, 8, e63115.	2.5	33
79	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
80	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
81	The locomotor kinematics and ground reaction forces of walking giraffes. Journal of Experimental Biology, 2019, 222, .	1.7	32
82	Evolution of forelimb musculoskeletal function across the fish-to-tetrapod transition. Science Advances, 2021, 7, .	10.3	32
83	The evolution of pelvic limb muscle moment arms in bird-line archosaurs. Science Advances, 2021, 7, .	10.3	31
84	The Anatomical Foundation for Multidisciplinary Studies of Animal Limb Function: Examples from Dinosaur and Elephant Limb Imaging Studies. , 2008, , 23-38.		30
85	Morphological diversification of biomechanical traits: mustelid locomotor specializations and the macroevolution of long bone cross-sectional morphology. BMC Evolutionary Biology, 2019, 19, 37.	3.2	30
86	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
87	Elbow joint adductor moment arm as an indicator of forelimb posture in extinct quadrupedal tetrapods. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 2561-2570.	2.6	29
88	Foot pressure distributions during walking in African elephants (Loxodonta africana). Royal Society Open Science, 2016, 3, 160203.	2.4	28
89	Gearing effects of the patella (knee extensor muscle sesamoid) of the helmeted guineafowl during terrestrial locomotion. Journal of Zoology, 2017, 303, 178-187.	1.7	28
90	Regional differentiation of felidÂvertebral column evolution: a study of 3D shapeÂtrajectories. Organisms Diversity and Evolution, 2017, 17, 305-319.	1.6	28

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91	Hip joint articular soft tissues of non-dinosaurian Dinosauromorpha and early Dinosauria: evolutionary and biomechanical implications for Saurischia. Journal of Vertebrate Paleontology, 2018, 38, e1427593.	1.0	28
92	Divergent evolution of terrestrial locomotor abilities in extant Crocodylia. Scientific Reports, 2019, 9, 19302.	3.3	28
93	The extinct, giant giraffid Sivatherium giganteum : skeletal reconstruction and body mass estimation. Biology Letters, 2016, 12, 20150940.	2.3	24
94	Computational modelling of muscle fibre operating ranges in the hindlimb of a small ground bird (Eudromia elegans), with implications for modelling locomotion in extinct species. PLoS Computational Biology, 2021, 17, e1008843.	3.2	24
95	Structure, ontogeny and evolution of the patellar tendon in emus (Dromaius novaehollandiae) and other palaeognath birds. PeerJ, 2014, 2, e711.	2.0	24
96	Analysis of hindlimb muscle moment arms in Tyrannosaurus rex using a three-dimensional musculoskeletal computer model: implications for stance, gait, and speed. Paleobiology, 2005, 31, 676-701.	2.0	23
97	Scaling of sensorimotor control in terrestrial mammals. Proceedings of the Royal Society B: Biological Sciences, 2014, 281, 20141911.	2.6	23
98	Big cat, small cat: reconstructing body size evolution in living and extinct Felidae. Journal of Evolutionary Biology, 2015, 28, 1516-1525.	1.7	23
99	A preliminary case study of the effect of shoe-wearing on the biomechanics of a horseâ€™s foot. PeerJ, 2016, 4, e2164.	2.0	23
100	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
101	The scaling of postcranial muscles in cats (Felidae) <scp>II</scp>: hindlimb and lumbosacral muscles. Journal of Anatomy, 2016, 229, 142-152.	1.5	22
102	Sesamoid bones in tuatara (Sphenodon punctatus) investigated with Xâ€ray microtomography, and implications for sesamoid evolution in Lepidosauria. Journal of Morphology, 2017, 278, 62-72.	1.2	22
103	Musculoskeletal modelling of the Nile crocodile (Crocodylus niloticus) hindlimb: Effects of limb posture on leverage during terrestrial locomotion. Journal of Anatomy, 2021, 239, 424-444.	1.5	22
104	Temporal gait parameters in the alpaca and the evolution of pacing and trotting locomotion in the Camelidae. Journal of Zoology, 2011, 283, 193-202.	1.7	21
105	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
106	Limb bone scaling in hopping macropods and quadrupedal artiodactyls. Royal Society Open Science, 2018, 5, 180152.	2.4	21
107	Three-dimensional anatomy of the ostrich (Struthio camelus) knee joint. PeerJ, 2014, 2, e706.	2.0	21
108	OSTEOPATHOLOGY IN THE FEET OF RHINOCEROSES: LESION TYPE AND DISTRIBUTION. Journal of Zoo and Wildlife Medicine, 2013, 44, 918-927.	0.6	20

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109	Evolution of Hindlimb Muscle Anatomy Across the Tetrapod Waterâ€toâ€Land Transition, Including Comparisons With Forelimb Anatomy. Anatomical Record, 2020, 303, 218-234.	1.4	20
110	Predictive simulations of running gait reveal a critical dynamic role for the tail in bipedal dinosaur locomotion. Science Advances, 2021, 7, eabi7348.	10.3	20
111	Giant extinct caiman breaks constraint on the axial skeleton of extant crocodylians. ELife, 2019, 8, .	6.0	20
112	Segmental Kinematic Coupling of the Human Spinal Column during Locomotion. Journal of Bionic Engineering, 2008, 5, 328-334.	5.0	19
113	Two applications of 3D semi-landmark morphometrics implying different template designs: the theropod pelvis and the shrew skull. Comptes Rendus - Palevol, 2010, 9, 411-422.	0.2	18
114	Cellular preservation of musculoskeletal specializations in the Cretaceous bird Confuciusornis. Nature Communications, 2017, 8, 14779.	12.8	18
115	Evolutionary parallelisms of pectoral and pelvic network-anatomy from fins to limbs. Science Advances, 2019, 5, eaau7459.	10.3	18
116	The evolutionary biomechanics of locomotor function in giant land animals. Journal of Experimental Biology, 2021, 224, .	1.7	18
117	What makes an accurate and reliable subject-specific finite element model? A case study of an elephant femur. Journal of the Royal Society Interface, 2012, 9, 351-361.	3.4	17
118	Anatomy, morphology and evolution of the patella in squamate lizards and tuatara (<i>Sphenodon) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.5	17
119	Limb Kinematics, Kinetics and Muscle Dynamics During the Sit-to-Stand Transition in Greyhounds. Frontiers in Bioengineering and Biotechnology, 2018, 6, 162.	4.1	17
120	Relating neuromuscular control to functional anatomy of limb muscles in extant archosaurs. Journal of Morphology, 2019, 280, 666-680.	1.2	17
121	A proposed standard for quantifying <scp>3â€D</scp> hindlimb joint poses in living and extinct archosaurs. Journal of Anatomy, 2022, 241, 101-118.	1.5	17
122	Bone Apparent and Material Densities Examined by Cone Beam Computed Tomography and the Archimedes Technique: Comparison of the Two Methods and Their Results. Frontiers in Mechanical Engineering, 2018, 3, .	1.8	16
123	Size-Related Changes in Foot Impact Mechanics in Hoofed Mammals. PLoS ONE, 2013, 8, e54784.	2.5	16
124	The running kinematics of free-roaming giraffes, measured using a low cost unmanned aerial vehicle (UAV). PeerJ, 2019, 7, e6312.	2.0	16
125	Anatomical network analysis of the musculoskeletal system reveals integration loss and parcellation boost during the fins-to-limbs transition. Evolution; International Journal of Organic Evolution, 2018, 72, 601-618.	2.3	15
126	Building a Bird: Musculoskeletal Modeling and Simulation of Wing-Assisted Incline Running During Avian Ontogeny. Frontiers in Bioengineering and Biotechnology, 2018, 6, 140.	4.1	15

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127	Patterns of Limb and Epaxial Muscle Activity During Walking in the Fire Salamander,Salamandra salamandra. Integrative Organismal Biology, 2020, 2, obaa015.	1.8	15
128	Anatomy, ontogeny, and evolution of the archosaurian respiratory system: A case study on Alligator mississippiensis and Struthio camelus. Journal of Anatomy, 2021, 238, 845-873.	1.5	15
129	Coordination of lateral body bending and leg movements for sprawled posture quadrupedal locomotion. International Journal of Robotics Research, 2021, 40, 747-763.	8.5	15
130	Analysis of the moment arms and kinematics of ostrich (Struthio camelus) double patellar sesamoids. Journal of Experimental Zoology Part A: Ecological and Integrative Physiology, 2017, 327, 163-171.	1.9	14
131	A quantitative evaluation of physical and digital approaches to centre of mass estimation. Journal of Anatomy, 2017, 231, 758-775.	1.5	14
132	Foot pressure distribution in White Rhinoceroses (Ceratotherium simum) during walking. PeerJ, 2019, 7, e6881.	2.0	14
133	3D Morphometric and Posture Study of Felid Scapulae Using Statistical Shape Modelling. PLoS ONE, 2012, 7, e34619.	2.5	13
134	Integrating morphology and inÂvivo skeletal mobility with digital models to infer function in brittle star arms. Journal of Anatomy, 2018, 233, 696-714.	1.5	12
135	Relationships of mass properties and body proportions to locomotor habit in terrestrial Archosauria. Paleobiology, 2020, 46, 550-568.	2.0	12
136	More than one way to be a giant: Convergence and disparity in the hip joints of saurischian dinosaurs. Evolution; International Journal of Organic Evolution, 2020, 74, 1654-1681.	2.3	12
137	Limb myology and muscle architecture of the Indian rhinocerosRhinoceros unicornisand the white rhinocerosCeratotherium simum(Mammalia: Rhinocerotidae). PeerJ, 2021, 9, e11314.	2.0	12
138	Skeletal pathology and variable anatomy in elephant feet assessed using computed tomography. PeerJ, 2017, 5, e2877.	2.0	12
139	Femoral specializations to locomotor habits in early archosauriforms. Journal of Anatomy, 2022, 240, 867-892.	1.5	12
140	Theropod Locomotion. American Zoologist, 2000, 40, 640-663.	0.7	11
141	Arm waving in stylophoran echinoderms: three-dimensional mobility analysis illuminates cornute locomotion. Royal Society Open Science, 2020, 7, 200191.	2.4	11
142	Three-dimensional polygonal muscle modelling and line of action estimation in living and extinct taxa. Scientific Reports, 2022, 12, 3358.	3.3	11
143	Walkingâ€"and Running and Jumpingâ€"with Dinosaurs and their Cousins, Viewed Through the Lens of Evolutionary Biomechanics. Integrative and Comparative Biology, 2022, 62, 1281-1305.	2.0	10
144	Bony lesions in early tetrapods and the evolution of mineralized tissue repair. Paleobiology, 2019, 45, 676-697.	2.0	9

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145	Exploring the functional morphology of the Gorilla shoulder through musculoskeletal modelling. Journal of Anatomy, 2021, 239, 207-227.	1.5	8
146	Predictive Simulations of Musculoskeletal Function and Jumping Performance in a Generalized Bird. Integrative Organismal Biology, 2021, 3, obab006.	1.8	8
147	Geometric Mechanics Applied to Tetrapod Locomotion on Granular Media. Lecture Notes in Computer Science, 2017, , 595-603.	1.3	8
148	Multi-Joint Analysis of Pose Viability Supports the Possibility of Salamander-Like Hindlimb Configurations in the Permian TetrapodEryops megacephalus. Integrative and Comparative Biology, 2022, 62, 139-151.	2.0	8
149	Tyrannosaurus rex Redux: Tyrannosaurus Tail Portrayals. Anatomical Record, 2011, 294, 756-758.	1.4	7
150	Finite-element modelling of mechanobiological factors influencing sesamoid tissue morphology in the patellar tendon of an ostrich. Royal Society Open Science, 2017, 4, 170133.	2.4	7
151	The evolution of femoral osteology and soft tissues on the line to extant birds (Neornithes). Zoological Journal of the Linnean Society, 2001, 131, 169-197.	2.3	7
152	Response: Of ideas, dichotomies, methods, and data â€“ how much do elephant kinematics differ from those of other large animals?. Journal of Experimental Biology, 2009, 212, 153-154.	1.7	6
153	New insights into the morphology of the Carboniferous tetrapodCrassigyrinus scoticusfrom computed tomography. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2018, 109, 157-175.	0.3	6
154	Medetomidineâ€“ketamineâ€“sevoflurane anaesthesia in juvenile Nile crocodiles (Crocodylus niloticus) undergoing experimental surgery. Veterinary Anaesthesia and Analgesia, 2019, 46, 84-89.	0.6	6
155	The Inverse Krogh Principle: All Organisms Are Worthy of Study. Physiological and Biochemical Zoology, 2023, 96, 1-16.	1.5	6
156	RADIOGRAPHIC PROTOCOL AND NORMAL ANATOMY OF THE HIND FEET IN THE WHITE RHINOCEROS (CERATOTHERIUM SIMUM). Veterinary Radiology and Ultrasound, 2015, 56, 124-132.	0.9	5
157	Three-dimensional visualization as a tool for interpreting locomotion strategies in ophiuroids from the Devonian HunsrÃ¼ck Slate. Royal Society Open Science, 2020, 7, 201380.	2.4	4
158	Early birds surmount steep slopes. Nature, 2003, 426, 777-778.	27.8	3
159	More thoughts on the relationship between apparent and material densities in bone. Journal of Biomechanics, 2009, 42, 794-795.	2.1	3
160	A growing size synthesis. Current Biology, 2012, 22, R309-R314.	3.9	3
161	Can skeletal surface area predict in vivo foot surface area?. Journal of Anatomy, 2020, 236, 72-84.	1.5	3
162	Low effective mechanical advantage of giraffesâ€™ limbs during walking reveals trade-off between limb length and locomotor performance. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	3

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163	What makes an accurate and reliable subject-specific finite element model? A case study of an elephant femur. Journal of the Royal Society Interface, 2014, 11, 20140700.	3.4	2
164	What makes an accurate and reliable subject-specific finite element model? A case study of an elephant femur. Journal of the Royal Society Interface, 2014, 11, 20140854.	3.4	2
165	Appendicular Muscle Physiology and Biomechanics inCrocodylus niloticus. Integrative Organismal Biology, 2020, 2, obaa038.	1.8	2
166	Evolution of the patella and patelloid in marsupial mammals. PeerJ, 2020, 8, e9760.	2.0	2
167	Estimating Gaits of an Ancient Crocodile-Line Archosaur Through Trajectory Optimization, With Comparison to Fossil Trackways. Frontiers in Bioengineering and Biotechnology, 2021, 9, 800311.	4.1	2
168	Dynasty of the plastic fish. Nature, 2014, 513, 37-38.	27.8	1
169	A Guide to Inverse Kinematic Marker-Guided Rotoscoping Using IK Solvers. Integrative Organismal Biology, 2022, 4, obac002.	1.8	1
170	Comparison of the armâ€lowering performance between Gorilla and Homo through musculoskeletal modeling. American Journal of Biological Anthropology, 2022, 178, 399-416.	1.1	1
171	The movements of limb segments and joints during locomotion in African and Asian elephants. Journal of Experimental Biology, 2008, 211, 3057-3057.	1.7	0
172	Functional specialization and ontogenetic scaling of limb anatomy in Alligator mississippiensis. Journal of Anatomy, 2011, 219, 542-547.	1.5	0