

Richard Blob

List of Publications by Year in descending order

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Version: 2024-02-01

102
papers

2,594
citations

201575

27
h-index

223716

46
g-index

103
all docs

103
docs citations

103
times ranked

1746
citing authors

#	ARTICLE	IF	CITATIONS
1	Anatomy informs geology: Hydrodynamic dispersal of alligator bones, with implications for taphonomic interpretations of fossil deposits of crocodylians, dinosaurs, and other morphologically novel taxa. <i>Anatomical Record</i> , 2023, 306, 1618-1630.	0.8	1
2	Assessing Occurrence and Biological Consequences of Contaminants of Emerging Concern on Oceanic Islands. <i>Water (Switzerland)</i> , 2022, 14, 275.	1.2	2
3	Kinematic comparisons between mudskipper fins and salamander limbs during terrestrial locomotion. <i>Journal of Experimental Zoology Part A: Ecological and Integrative Physiology</i> , 2022, , .	0.9	3
4	Terrestrial force production by the limbs of a semi-aquatic salamander provides insight into the evolution of terrestrial locomotor mechanics. <i>Journal of Experimental Biology</i> , 2022, 225, .	0.8	6
5	Sucker Shapes, Skeletons, and Bioinspiration: How Hard and Soft Tissue Morphology Generates Adhesive Performance in Waterfall Climbing Goby Fishes. <i>Integrative and Comparative Biology</i> , 2022, 62, 934-944.	0.9	6
6	Bendy to the bone: Links between vertebral morphology and waterfall climbing in amphidromous gobioid fishes. <i>Journal of Anatomy</i> , 2021, 239, 747-754.	0.9	3
7	Thinking Inside the Box: Comparative Limb Bone Shape in Emydid Turtles. <i>Journal of Herpetology</i> , 2021, 55, .	0.2	0
8	Interactions among multiple selective pressures on the formâ€“function relationship in insular stream fishes. <i>Biological Journal of the Linnean Society</i> , 2021, 134, 557-567.	0.7	3
9	Wading through water: effects of water depth and speed on the drag and kinematics of walking Chilean flamingos, <i>Phoenicopterus chilensis</i> . <i>Journal of Experimental Biology</i> , 2021, 224, .	0.8	3
10	Adhesive force and endurance of the pelvic sucker across different modes of waterfall-climbing in gobiid fishes: Contrasting climbing mechanisms share aspects of ontogenetic change. <i>Zoology</i> , 2021, 149, 125969.	0.6	9
11	Sticking to it: testing passive pull-off forces in waterfall-climbing fishes across challenging substrates. <i>Journal of Experimental Biology</i> , 2021, 224, .	0.8	6
12	Ontogenetic changes in limb posture, kinematics, forces and joint moments in American alligators (<i>Alligator mississippiensis</i>). <i>Journal of Experimental Biology</i> , 2021, 224, .	0.8	7
13	Variation in limb loading magnitude and timing in tetrapods. <i>Journal of Experimental Biology</i> , 2020, 223, .	0.8	25
14	Functional correlations of axial muscle fiber type proportions in the waterfallâ€“climbing Hawaiian stream fish <i>Sicyopterus stimpsoni</i> . <i>Journal of Anatomy</i> , 2020, 236, 1160-1166.	0.9	4
15	Differences in kinematic plasticity between freshwater turtle species underlie differences in swimming performance in response to varying flow conditions. <i>Biological Journal of the Linnean Society</i> , 2019, 127, 762-770.	0.7	1
16	The Translation of Movement From the Equine to Rider With Relevance for Hippotherapy. <i>Journal of Equine Veterinary Science</i> , 2019, 77, 125-131.	0.4	1
17	Relationship of escape performance with predator regime and ontogeny in fishes. <i>Biological Journal of the Linnean Society</i> , 2019, 127, 324-336.	0.7	12
18	Evidence of local adaptation in a waterfall-climbing Hawaiian goby fish derived from coupled biophysical modeling of larval dispersal and post-settlement selection. <i>BMC Evolutionary Biology</i> , 2019, 19, 88.	3.2	9

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19	Variation in Morphology and Kinematics Underlies Variation in Swimming Stability and Turning Performance in Freshwater Turtles. <i>Integrative Organismal Biology</i> , 2019, 1, .	0.9	4
20	Comparative limb bone scaling in turtles: Phylogenetic transitions with changes in functional demands?. <i>Journal of Morphology</i> , 2019, 280, 593-603.	0.6	2
21	Functional Diversity of Evolutionary Novelty: Insights from Waterfall-Climbing Kinematics and Performance of Juvenile Gobiid Fishes. <i>Integrative Organismal Biology</i> , 2019, 1, obz029.	0.9	14
22	Pectoral and pelvic girdle rotations during walking and swimming in a semi-aquatic turtle: testing functional role and constraint. <i>Journal of Experimental Biology</i> , 2019, 222, .	0.8	6
23	<i>Integrative Organismal Biology</i> – A Journal We Want and Need. <i>Integrative Organismal Biology</i> , 2019, 1, .	0.9	0
24	The impact of keels and tails on turtle swimming performance and their potential as models for biomimetic design. <i>Bioinspiration and Biomimetics</i> , 2019, 14, 016002.	1.5	4
25	Biomechanical factors influencing successful self-righting in the pleurodire turtle, <i>Emydura subglobosa</i> . <i>Journal of Experimental Biology</i> , 2018, 221, .	0.8	6
26	Effects of Rider Experience Level on Horse Kinematics and Behavior. <i>Journal of Equine Veterinary Science</i> , 2018, 68, 68-72.	0.4	11
27	Intra- and inter-specific morphological diversity of amphidromous gobies influences waterfall-climbing performance. <i>Journal of Zoology</i> , 2018, 306, 243-251.	0.8	14
28	Contrasting post-settlement selection results in many-to-one mapping of high performance phenotypes in the Hawaiian waterfall-climbing goby <i>Sicyopterus stimpsoni</i> . <i>Evolutionary Ecology</i> , 2017, 31, 489-516.	0.5	14
29	One foot out the door: limb function during swimming in terrestrial versus aquatic turtles. <i>Biology Letters</i> , 2017, 13, 20160732.	1.0	10
30	Hindlimb muscle function in turtles: is novel skeletal design correlated with novel muscle function?. <i>Journal of Experimental Biology</i> , 2017, 220, 2554-2562.	0.8	10
31	Humeral loads during swimming and walking in turtles: implications for morphological change during aquatic reinvasions. <i>Journal of Experimental Biology</i> , 2017, 220, 3873-3877.	0.8	15
32	A novel, bounding gait in swimming turtles: implications for aquatic locomotor diversity. <i>Journal of Experimental Biology</i> , 2017, 220, 3611-3615.	0.8	4
33	Data Management Rubric for Video Data in Organismal Biology. <i>Integrative and Comparative Biology</i> , 2017, 57, 33-47.	0.9	35
34	Tail use improves performance on soft substrates in models of early vertebrate land locomotors. <i>Science</i> , 2016, 353, 154-158.	6.0	78
35	Flowing water affects fish fast-starts: escape performance of the Hawaiian stream goby, <i>Sicyopterus stimpsoni</i> . <i>Journal of Experimental Biology</i> , 2016, 219, 3100-3105.	0.8	12
36	“On the Fence” versus “All in”: Insights from Turtles for the Evolution of Aquatic Locomotor Specializations and Habitat Transitions in Tetrapod Vertebrates. <i>Integrative and Comparative Biology</i> , 2016, 56, 1310-1322.	0.9	20

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37	Pelvic girdle mobility of cryptodire and pleurodire turtles during walking and swimming. <i>Journal of Experimental Biology</i> , 2016, 219, 2650-8.	0.8	22
38	In vivo strains in the femur of the nine-banded armadillo (<i>Dasypus novemcinctus</i>). <i>Journal of Experimental Biology</i> , 2016, 219, 2650-8.	0.6	6
39	Bone strain magnitude is correlated with bone strain rate in tetrapods: implications for models of mechanotransduction. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2015, 282, 20150321.	1.2	13
40	Comparative limb bone loading in the humerus and femur of the tiger salamander <i>Ambystoma tigrinum</i> : testing the "mixed-chain" hypothesis for skeletal safety factors. <i>Journal of Experimental Biology</i> , 2015, 219, 341-53.	0.8	12
41	Local adaptation despite high gene flow in the waterfall-climbing Hawaiian goby, <i>Sicyopterus stimpsoni</i> . <i>Molecular Ecology</i> , 2015, 24, 545-563.	2.0	42
42	Limb bone loading in swimming turtles: changes in loading facilitate transitions from tubular to flipper-shaped limbs during aquatic invasions. <i>Biology Letters</i> , 2015, 11, 20150110.	1.0	24
43	Terrestrial Locomotion—Where Do We Stand, Where Are We Going? An Introduction to the Symposium. <i>Integrative and Comparative Biology</i> , 2014, 54, 1051-1057.	0.9	6
44	Diversity of Limb-Bone Safety Factors for Locomotion in Terrestrial Vertebrates: Evolution and Mixed Chains. <i>Integrative and Comparative Biology</i> , 2014, 54, 1058-1071.	0.9	40
45	Feeding performance of the Hawaiian sleeper, <i>Eleotris sandwicensis</i> (Gobioidae: Eleotridae): correlations between predatory functional modulation and selection pressures on prey. <i>Biological Journal of the Linnean Society</i> , 2014, 111, 359-374.	0.7	15
46	Forelimb kinematics during swimming in the pig-nosed turtle, <i>Carettochelys insculpta</i> , compared with other turtle taxa: rowing versus flapping, convergence versus intermediacy. <i>Journal of Experimental Biology</i> , 2013, 216, 668-80.	0.8	26
47	Differences in locomotor behavior correspond to different patterns of morphological selection in two species of waterfall-climbing gobiid fishes. <i>Evolutionary Ecology</i> , 2013, 27, 949-969.	0.5	18
48	Correlation of muscle function and bone strain in the hindlimb of the river cooter turtle (<i>Pseudemys concinna</i>). <i>Journal of Morphology</i> , 2013, 274, 1060-1069.	0.6	11
49	Vertebrate Land Invasions—Past, Present, and Future: An Introduction to the Symposium. <i>Integrative and Comparative Biology</i> , 2013, 53, 192-196.	0.9	48
50	Propulsive Forces of Mudskipper Fins and Salamander Limbs during Terrestrial Locomotion: Implications for the Invasion of Land. <i>Integrative and Comparative Biology</i> , 2013, 53, 283-294.	0.9	88
51	Musculoskeletal determinants of pelvic sucker function in hawaiian stream gobiid fishes: Interspecific comparisons and allometric scaling. <i>Journal of Morphology</i> , 2013, 274, 733-742.	0.6	19
52	Forelimb muscle function in pig-nosed turtles, <i>Carettochelys insculpta</i> : testing neuromotor conservation between rowing and flapping in swimming turtles. <i>Biology Letters</i> , 2013, 9, 20130471.	1.0	7
53	Evolutionary Novelty versus Exaptation: Oral Kinematics in Feeding versus Climbing in the Waterfall-Climbing Hawaiian Goby <i>Sicyopterus stimpsoni</i> . <i>PLoS ONE</i> , 2013, 8, e53274.	1.1	22
54	Stairway to Heaven: Evaluating Levels of Biological Organization Correlated with the Successful Ascent of Natural Waterfalls in the Hawaiian Stream Goby <i>Sicyopterus stimpsoni</i> . <i>PLoS ONE</i> , 2013, 8, e84851.	1.1	19

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55	Performance and scaling of a novel locomotor structure: adhesive capacity of climbing gobiid fishes. <i>Journal of Experimental Biology</i> , 2012, 215, 3925-3936.	0.8	62
56	Finding paradise: cues directing the migration of the waterfall climbing Hawaiian gobioid <i>Sicyopterus stimpsoni</i> . <i>Journal of Fish Biology</i> , 2012, 81, 903-920.	0.7	14
57	Locomotor loading mechanics in the hindlimbs of tegu lizards (<i>Tupinambis merianae</i>): comparative and evolutionary implications. <i>Journal of Experimental Biology</i> , 2011, 214, 2616-2630.	0.8	25
58	Jaw muscle fiber type distribution in Hawaiian gobioid stream fishes: histochemical correlations with feeding ecology and behavior. <i>Zoology</i> , 2011, 114, 340-347.	0.6	10
59	Loading mechanics of the femur in tiger salamanders (<i>Ambystoma tigrinum</i>) during terrestrial locomotion. <i>Journal of Experimental Biology</i> , 2011, 214, 2603-2615.	0.8	17
60	<i>In vivo</i> strains in the femur of the Virginia opossum (<i>Didelphis virginiana</i>) during terrestrial locomotion: testing hypotheses of evolutionary shifts in mammalian bone loading and design. <i>Journal of Experimental Biology</i> , 2011, 214, 2631-2640.	0.8	18
61	Femoral loading mechanics in the Virginia opossum, <i>Didelphis virginiana</i> : torsion and mediolateral bending in mammalian locomotion. <i>Journal of Experimental Biology</i> , 2011, 214, 3455-3466.	0.8	14
62	Hydrodynamic stability of the painted turtle (<i>Chrysemys picta</i>): effects of four-limbed rowing versus forelimb flapping in rigid-bodied tetrapods. <i>Journal of Experimental Biology</i> , 2011, 214, 1153-1162.	0.8	14
63	Forelimb kinematics and motor patterns of swimming loggerhead sea turtles (<i>Caretta caretta</i>): are motor patterns conserved in the evolution of new locomotor strategies?. <i>Journal of Experimental Biology</i> , 2011, 214, 3314-3323.	0.8	39
64	Motor patterns of distal hind limb muscles in walking turtles: Implications for models of limb bone loading. <i>Journal of Morphology</i> , 2010, 271, 1527-1536.	0.6	8
65	Hydrodynamic stability in posthatchling loggerhead (<i>Caretta caretta</i>) and green (<i>Chelonia mydas</i>) sea turtles. <i>Zoology</i> , 2010, 113, 158-167.	0.6	12
66	Morphological Selection and the Evaluation of Potential Tradeoffs Between Escape from Predators and the Climbing of Waterfalls in the Hawaiian Stream Goby <i>Sicyopterus stimpsoni</i> . <i>Integrative and Comparative Biology</i> , 2010, 50, 1185-1199.	0.9	61
67	Forelimb kinematics and motor patterns of the slider turtle (<i>Trachemys scripta</i>) during swimming and walking: shared and novel strategies for meeting locomotor demands of water and land. <i>Journal of Experimental Biology</i> , 2010, 213, 3515-3526.	0.8	28
68	Comparative morphology of the ilium of anurans and urodeles (Lissamphibia) and a re-assessment of the anuran affinities of <i>Nezpercius dodsoni</i> Blob et al., 2001. <i>Journal of Vertebrate Paleontology</i> , 2010, 30, 1684-1696.	0.4	28
69	Morphological selection in an extreme flow environment: body shape and waterfall-climbing success in the Hawaiian stream fish <i>Sicyopterus stimpsoni</i> . <i>Integrative and Comparative Biology</i> , 2009, 49, 732-734.	0.9	3
70	Feeding kinematics and performance of Hawaiian stream gobies, <i>Awaous guamensis</i> and <i>Lentipes concolor</i> : Linkage of functional morphology and ecology. <i>Journal of Morphology</i> , 2009, 270, 344-356.	0.6	9
71	Jaw lever analysis of Hawaiian gobioid stream fishes: A simulation study of morphological diversity and functional performance. <i>Journal of Morphology</i> , 2009, 270, 976-983.	0.6	13
72	Mechanical Properties of the Hindlimb Bones of Bullfrogs and Cane Toads in Bending and Torsion. <i>Anatomical Record</i> , 2009, 292, 935-944.	0.8	19

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73	A Phylogenetic Analysis of Sexual Size Dimorphism in Turtles. <i>Herpetologica</i> , 2009, 65, 70-81.	0.2	25
74	Muscle fiber type distribution in climbing Hawaiian gobioid fishes: Ontogeny and correlations with locomotor performance. <i>Zoology</i> , 2008, 111, 114-122.	0.6	21
75	Antler stiffness in caribou (<i>Rangifer tarandus</i>): Testing variation in bone material properties between males and females. <i>Zoology</i> , 2008, 111, 476-482.	0.6	6
76	Mechanics of limb bone loading during terrestrial locomotion in river cooter turtles (<i>Pseudemys</i>)	0.8	42
77	<i>In vivo</i> strains in the femur of river cooter turtles (<i>Pseudemys concinna</i>) during terrestrial locomotion: tests of force-platform models of loading mechanics. <i>Journal of Experimental Biology</i> , 2008, 211, 2397-2407.	0.8	46
78	Going with the flow: ecomorphological variation across aquatic flow regimes: an introduction to the symposium. <i>Integrative and Comparative Biology</i> , 2008, 48, 699-701.	0.9	7
79	Morphological selection in an extreme flow environment: body shape and waterfall-climbing success in the Hawaiian stream fish <i>Sicyopterus stimpsoni</i> . <i>Integrative and Comparative Biology</i> , 2008, 48, 734-749.	0.9	54
80	Mechanics of limb bone loading during terrestrial locomotion in river cooter turtles (<i>Pseudemys</i>)	0.8	5
81	Ontogenetic Scaling of Body Proportions In Waterfall-climbing Gobiid Fishes from Hawai'i and Dominica: Implications for Locomotor Function. <i>Copeia</i> , 2007, 2007, 755-764.	1.4	34
82	Ontogenetic change in novel functions: waterfall climbing in adult Hawaiian gobiid fishes. <i>Journal of Zoology</i> , 2007, 273, 200-209.	0.8	41
83	Functional diversity in extreme environments: effects of locomotor style and substrate texture on the waterfall-climbing performance of Hawaiian gobiid fishes. <i>Journal of Zoology</i> , 2006, 268, 315-324.	0.8	78
84	Antler stiffness in moose (<i>Alces alces</i>): Correlated evolution of bone function and material properties?. <i>Journal of Morphology</i> , 2006, 267, 1075-1086.	0.6	28
85	Aquatic turning performance of painted turtles (<i>Chrysemys picta</i>) and functional consequences of a rigid body design. <i>Journal of Experimental Biology</i> , 2006, 209, 4203-4213.	0.8	61
86	The survival of <i>Sicyopterus stimpsoni</i> , an endemic amphidromous Hawaiian gobiid fish, relies on the hydrological cycles of streams: evidence from changes in algal composition of diet through growth stages fish. <i>Aquatic Ecology</i> , 2005, 39, 473-484.	0.7	26
87	Hindlimb function in the alligator: integrating movements, motor patterns, ground reaction forces and bone strain of terrestrial locomotion. <i>Journal of Experimental Biology</i> , 2005, 208, 993-1009.	0.8	47
88	Tail Kinematics of Juvenile Common Snapping Turtles during Aquatic Walking. <i>Journal of Herpetology</i> , 2004, 38, 360-369.	0.2	13
89	Tracheal Respiration in Insects Visualized with Synchrotron X-ray Imaging. <i>Science</i> , 2003, 299, 558-560.	6.0	212
90	Kinematics of waterfall climbing in Hawaiian freshwater fishes (Gobiidae): vertical propulsion at the aquatic-terrestrial interface. <i>Journal of Zoology</i> , 2003, 261, 191-205.	0.8	99

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91	Motor control of locomotor hindlimb posture in the American alligator (<i>Alligator mississippiensis</i>). <i>Journal of Experimental Biology</i> , 2003, 206, 4327-4340.	0.8	49
92	A new fossil frog from the Upper Cretaceous Judith River Formation of Montana. <i>Journal of Vertebrate Paleontology</i> , 2001, 21, 190-194.	0.4	9
93	Evolution of hindlimb posture in nonmammalian therapsids: biomechanical tests of paleontological hypotheses. <i>Paleobiology</i> , 2001, 27, 14-38.	1.3	91
94	Correlates of variation in deer antler stiffness: age, mineral content, intra-antler location, habitat, and phylogeny. <i>Biological Journal of the Linnean Society</i> , 2001, 74, 113-120.	0.7	25
95	How muscles accommodate movement in different physical environments: aquatic vs. terrestrial locomotion in vertebrates. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2001, 131, 61-75.	0.8	82
96	Correlates of variation in deer antler stiffness: age, mineral content, intra-antler location, habitat, and phylogeny. <i>Biological Journal of the Linnean Society</i> , 2001, 74, 113-120.	0.7	1
97	Comparative kinematics of the forelimb during swimming in red-eared slider (<i>Trachemys</i>) <i>TJ ETQq1 1 0.784314</i> <i>rgBT /Overlock 10 T1</i> 2001, 204, 3261-3271.	0.8	59
98	Mechanics of limb bone loading during terrestrial locomotion in the green iguana (<i>Iguana iguana</i>) and American alligator (<i>Alligator mississippiensis</i>). <i>Journal of Experimental Biology</i> , 2001, 204, 1099-1122.	0.8	74
99	Comparative kinematics of the forelimb during swimming in red-eared slider (<i>Trachemys scripta</i>) and spiny softshell (<i>Apalone spinifera</i>) turtles. <i>Journal of Experimental Biology</i> , 2001, 204, 3261-71.	0.8	42
100	Interspecific scaling of the hindlimb skeleton in lizards, crocodylians, felids and canids: does limb bone shape correlate with limb posture?. <i>Journal of Zoology</i> , 2000, 250, 507-531.	0.8	65
101	Evaluation of Vent Position from Lizard Skeletons for Estimation of Snout: Vent Length and Body Mass. <i>Copeia</i> , 1998, 1998, 792.	1.4	12
102	The significance of vertebrate microfossil size and shape distributions for faunal abundance reconstructions: a Late Cretaceous example. <i>Paleobiology</i> , 1996, 22, 422-435.	1.3	47