

Duncan J Irschick

List of Publications by Year in descending order

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Version: 2024-02-01

88
papers

5,357
citations

87888

38
h-index

88630

70
g-index

100
all docs

100
docs citations

100
times ranked

4201
citing authors

#	ARTICLE	IF	CITATIONS
1	Creation of accurate 3D models of harbor porpoises (<i>Phocoena phocoena</i>) using 3D photogrammetry. <i>Marine Mammal Science</i> , 2021, 37, 482-491.	1.8	15
2	Quantifying surface topography of biological systems from 3D scans. <i>Methods in Ecology and Evolution</i> , 2021, 12, 1265-1276.	5.2	5
3	Linking ecomechanical models and functional traits to understand phenotypic diversity. <i>Trends in Ecology and Evolution</i> , 2021, 36, 860-873.	8.7	41
4	Field-Based Feeding Performance and Kinematics of Bull Sharks, <i>Carcharhinus leucas</i> (Carcharhiniformes: Carcharhinidae). <i>Ichthyology and Herpetology</i> , 2021, 109, .	0.8	4
5	Locomotion and palaeoclimate explain the re-evolution of quadrupedal body form in <i>Brachymeles</i> lizards. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2020, 287, 20201994.	2.6	9
6	Using 3D digital photogrammetry to examine scaling of the body axis in burrowing skinks. <i>Journal of Morphology</i> , 2020, 281, 1382-1390.	1.2	3
7	Dental morphology and microstructure of the Prickly Dogfish <i>Oxynotus bruniensis</i> (Squaliformes:). <i>Trends in Ecology and Evolution</i> , 2020, 35, 1078-1084.	1.5	4
8	Observation of a Sea Lamprey, <i>Petromyzon marinus</i> , on a Pelagic Blue Shark, <i>Prionace glauca</i> . <i>Northeastern Naturalist</i> , 2020, 27, .	0.3	2
9	Bite performance and feeding behaviour of the sand tiger shark <i>Carcharias taurus</i> . <i>Journal of Fish Biology</i> , 2019, 95, 881-892.	1.6	7
10	Estimating body mass of free-living whales using aerial photogrammetry and 3D volumetrics. <i>Methods in Ecology and Evolution</i> , 2019, 10, 2034-2044.	5.2	75
11	The role of bite force in the evolution of head shape and head shape dimorphism in <i>Anolis</i> lizards. <i>Functional Ecology</i> , 2019, 33, 2191-2202.	3.6	11
12	Do the relationships between hind limb anatomy and sprint speed variation differ between sexes in <i>Anolis</i> lizards?. <i>Journal of Experimental Biology</i> , 2019, 222, .	1.7	11
13	Ontogenetic scaling patterns of lizard skin surface structure as revealed by gel-based stereoprofilometry. <i>Journal of Anatomy</i> , 2019, 235, 346-356.	1.5	10
14	Ecosystem Function and Services of Aquatic Predators in the Anthropocene. <i>Trends in Ecology and Evolution</i> , 2019, 34, 369-383.	8.7	143
15	The relationship between habitat use and body shape in geckos. <i>Journal of Morphology</i> , 2019, 280, 722-730.	1.2	10
16	Genital morphology associated with mating strategy in the polymorphic lizard, <i>Uta stansburiana</i> . <i>Journal of Morphology</i> , 2019, 280, 184-192.	1.2	9
17	Opsin gene expression regulated by testosterone level in a sexually dimorphic lizard. <i>Scientific Reports</i> , 2018, 8, 16055.	3.3	5
18	30 Years of <i>Functional Ecology</i> . <i>Functional Ecology</i> , 2017, 31, 4-6.	3.6	0

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19	Hemipenis shape and hindlimb size are highly correlated in Anolis lizards. <i>Biological Journal of the Linnean Society</i> , 2017, , .	1.6	2
20	A comparative morphological analysis of body and fin shape for eight shark species. <i>Biological Journal of the Linnean Society</i> , 2017, 122, 589-604.	1.6	24
21	High strength reversible adhesive closures. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2017, 55, 1783-1790.	2.1	4
22	Ecology drives natural variation in an extreme antipredator trait: a cost-benefit analysis integrating modelling and field data. <i>Functional Ecology</i> , 2016, 30, 953-963.	3.6	5
23	Ontogeny of head and caudal fin shape of an apex marine predator: The tiger shark (<i>Galeocerdo cuvier</i>). <i>Journal of Morphology</i> , 2016, 277, 556-564.	1.2	34
24	Extreme positive allometry of animal adhesive pads and the size limits of adhesion-based climbing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 1297-1302.	7.1	92
25	Developmental plasticity affects sexual size dimorphism in an anole lizard. <i>Functional Ecology</i> , 2016, 30, 235-243.	3.6	23
26	Geckos as Springs: Mechanics Explain Across-Species Scaling of Adhesion. <i>PLoS ONE</i> , 2015, 10, e0134604.	2.5	30
27	One size does not always fit all: a reply to Stroud and Feeley. <i>Trends in Ecology and Evolution</i> , 2015, 30, 297-298.	8.7	0
28	Evolutionary theory as a tool for predicting extinction risk. <i>Trends in Ecology and Evolution</i> , 2015, 30, 61-65.	8.7	64
29	Does whole-organism performance constrain resource use? A community test with desert lizards. <i>Biological Journal of the Linnean Society</i> , 2015, 115, 859-868.	1.6	8
30	Functional ecology: the evolution of an ecological journal. <i>Functional Ecology</i> , 2015, 29, 1-2.	3.6	2
31	Morphological scaling of body form in four shark species differing in ecology and life history. <i>Biological Journal of the Linnean Society</i> , 2015, 114, 126-135.	1.6	38
32	Trait compensation between boldness and the propensity for tail autotomy under different food availabilities in similarly aged brown anole lizards. <i>Functional Ecology</i> , 2015, 29, 385-392.	3.6	31
33	Functional ecology: moving forward into a new era of publishing. <i>Functional Ecology</i> , 2014, 28, 291-292.	3.6	1
34	Body condition predicts energy stores in apex predatory sharks. , 2014, 2, cou022-cou022.		29
35	Creating Gecko-Like Adhesives for "Real World" Surfaces. <i>Advanced Materials</i> , 2014, 26, 4345-4351.	21.0	112
36	Evo-devo beyond morphology: from genes to resource use. <i>Trends in Ecology and Evolution</i> , 2013, 28, 267-273.	8.7	25

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37	Functional ecology: integrative research in the modern age of ecology. <i>Functional Ecology</i> , 2013, 27, 1-4.	3.6	8
38	Evolutionary conservatism and convergence both lead to striking similarity in ecology, morphology and performance across continents in frogs. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2013, 280, 20132156.	2.6	94
39	Foils of flexion: the effects of perch compliance on lizard locomotion and perch choice in the wild. <i>Functional Ecology</i> , 2013, 27, 374-381.	3.6	40
40	An experimental test of the effect of signal size and performance capacity on dominance in the green anole lizard. <i>Functional Ecology</i> , 2012, 26, 3-10.	3.6	38
41	VERTEBRAL EVOLUTION AND THE DIVERSIFICATION OF SQUAMATE REPTILES. <i>Evolution; International Journal of Organic Evolution</i> , 2012, 66, 1044-1058.	2.3	44
42	Looking Beyond Fibrillar Features to Scale Gecko-Like Adhesion. <i>Advanced Materials</i> , 2012, 24, 1078-1083.	21.0	243
43	Biomimetics: Looking Beyond Fibrillar Features to Scale Gecko-Like Adhesion (<i>Adv. Mater.</i> 8/2012). <i>Advanced Materials</i> , 2012, 24, 994-994.	21.0	4
44	ALTERNATE PATHWAYS OF BODY SHAPE EVOLUTION TRANSLATE INTO COMMON PATTERNS OF LOCOMOTOR EVOLUTION IN TWO CLADES OF LIZARDS. <i>Evolution; International Journal of Organic Evolution</i> , 2010, 64, 1569-1582.	2.3	53
45	I.4 Functional Morphology: Muscles, Elastic Mechanisms, and Animal Performance. , 2009, , 27-37.		1
46	Steroid use and human performance: Lessons for integrative biologists. <i>Integrative and Comparative Biology</i> , 2009, 49, 354-364.	2.0	15
47	Hormonal regulation of whole-animal performance: Implications for selection. <i>Integrative and Comparative Biology</i> , 2009, 49, 349-353.	2.0	26
48	DIRECTIONAL EVOLUTION OF STOCKINESS COEVOLVES WITH ECOLOGY AND LOCOMOTION IN LIZARDS. <i>Evolution; International Journal of Organic Evolution</i> , 2009, 63, 215-227.	2.3	28
49	Thermal tolerance and Hsp70 expression in the Western fence lizard, <i>Sceloporus occidentalis</i> : Geographic variation in measures of acute stress and their role in selection on sprint speeds.. <i>FASEB Journal</i> , 2009, 23, LB121.	0.5	0
50	Allometry of behavior. <i>Trends in Ecology and Evolution</i> , 2008, 23, 394-401.	8.7	174
51	Anatomical Basis of Differences in Locomotor Behavior in Anolis Lizards: A Comparison Between Two Ecomorphs. <i>Bulletin of the Museum of Comparative Zoology</i> , 2008, 159, 213-238.	1.7	52
52	New Directions for Studying Selection in Nature: Studies of Performance and Communities. <i>Physiological and Biochemical Zoology</i> , 2007, 80, 557-567.	1.5	29
53	Determinants of sexual differences in escape behavior in lizards of the genus <i>Anolis</i> : a comparative approach. <i>Integrative and Comparative Biology</i> , 2007, 47, 200-210.	2.0	31
54	The Evolution of Performance-Based Male Fighting Ability in Caribbean <i>Anolis</i> Lizards. <i>American Naturalist</i> , 2007, 170, 573-586.	2.1	126

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55	A functional approach to sexual selection. <i>Functional Ecology</i> , 2007, 21, 621-626.	3.6	91
56	Do Displays Send Information about Ornament Structure and Male Quality in the Ornate Tree Lizard, <i>Urosaurus ornatus</i> ?. <i>Ethology</i> , 2007, 113, 1113-1122.	1.1	19
57	Rapid shifts in the chemical composition of aspen forests: an introduced herbivore as an agent of natural selection. <i>Biological Invasions</i> , 2007, 9, 715-722.	2.4	56
58	An analysis of the relative roles of plasticity and natural selection in the morphology and performance of a lizard (<i>Urosaurus ornatus</i>). <i>Oecologia</i> , 2007, 153, 489-499.	2.0	45
59	Are morphology-performance relationships invariant across different seasons? A test with the green anole lizard (<i>Anolis carolinensis</i>). <i>Oikos</i> , 2006, 114, 49-59.	2.7	43
60	Age-specific Forced Polymorphism: Implications of Ontogenetic Changes in Morphology for Male Mating Tactics. <i>Physiological and Biochemical Zoology</i> , 2006, 79, 73-82.	1.5	16
61	Ecological consequences of ontogenetic changes in head shape and bite performance in the Jamaican lizard <i>Anolis lineatopus</i> . <i>Biological Journal of the Linnean Society</i> , 2006, 89, 443-454.	1.6	102
62	THE QUICK AND THE FAST: THE EVOLUTION OF ACCELERATION CAPACITY IN ANOLIS LIZARDS. <i>Evolution; International Journal of Organic Evolution</i> , 2006, 60, 2137-2147.	2.3	69
63	An Analysis of Inter-Population Divergence in Visual Display Behavior of the Green Anole Lizard (<i>Anolis carolinensis</i>). <i>Ethology</i> , 2006, 112, 370-378.	1.1	29
64	No Evidence for Female Association with High-Performance males in the Green Anole Lizard, <i>Anolis carolinensis</i> . <i>Ethology</i> , 2006, 112, 707-715.	1.1	42
65	Whole-organism studies of adhesion in pad-bearing lizards: creative evolutionary solutions to functional problems. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 2006, 192, 1169-1177.	1.6	46
66	A functional perspective on sexual selection: insights and future prospects. <i>Animal Behaviour</i> , 2006, 72, 263-273.	1.9	198
67	THE QUICK AND THE FAST: THE EVOLUTION OF ACCELERATION CAPACITY IN ANOLIS LIZARDS. <i>Evolution; International Journal of Organic Evolution</i> , 2006, 60, 2137.	2.3	3
68	Out on a limb: the differential effect of substrate diameter on acceleration capacity in <i>Anolis</i> lizards. <i>Journal of Experimental Biology</i> , 2006, 209, 4515-4523.	1.7	44
69	HAVE MALE AND FEMALE GENITALIA COEVOLVED? A PHYLOGENETIC ANALYSIS OF GENITALIC MORPHOLOGY AND SEXUAL SIZE DIMORPHISM IN WEB-BUILDING SPIDERS (ARANEAE: ARANEOIDEA). <i>Evolution; International Journal of Organic Evolution</i> , 2005, 59, 1989-1999.	2.3	36
70	LOCOMOTOR COMPENSATION CREATES A MISMATCH BETWEEN LABORATORY AND FIELD ESTIMATES OF ESCAPE SPEED IN LIZARDS: A CAUTIONARY TALE FOR PERFORMANCE-TO-FITNESS STUDIES. <i>Evolution; International Journal of Organic Evolution</i> , 2005, 59, 1579-1587.	2.3	107
71	Intraspecific correlations among morphology, performance and habitat use within a green anole lizard (<i>Anolis carolinensis</i>) population. <i>Biological Journal of the Linnean Society</i> , 2005, 85, 211-221.	1.6	74
72	A comparison of habitat use, morphology, clinging performance and escape behaviour among two divergent green anole lizard (<i>Anolis carolinensis</i>) populations. <i>Biological Journal of the Linnean Society</i> , 2005, 85, 223-234.	1.6	111

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73	The relationship between dewlap size and performance changes with age and sex in a Green Anole (<i>Anolis carolinensis</i>) lizard population. <i>Behavioral Ecology and Sociobiology</i> , 2005, 59, 157-165.	1.4	56
74	Locomotor compensation creates a mismatch between laboratory and field estimates of escape speed in lizards: a cautionary tale for performance-to-fitness studies. <i>Evolution; International Journal of Organic Evolution</i> , 2005, 59, 1579-87.	2.3	21
75	Sexual dimorphism in head shape and diet in the cottonmouth snake (<i>Agkistrodon piscivorus</i>). <i>Journal of Zoology</i> , 2004, 264, 53-59.	1.7	101
76	Performance capacity, fighting tactics and the evolution of life-stage male morphs in the green anole lizard (<i>Anolis carolinensis</i>). <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2004, 271, 2501-2508.	2.6	226
77	Effects of loading and size on maximum power output and gait characteristics in geckos. <i>Journal of Experimental Biology</i> , 2003, 206, 3923-3934.	1.7	59
78	Measuring Performance in Nature: Implications for Studies of Fitness Within Populations. <i>Integrative and Comparative Biology</i> , 2003, 43, 396-407.	2.0	140
79	Evolutionary Approaches for Studying Functional Morphology: Examples from Studies of Performance Capacity. <i>Integrative and Comparative Biology</i> , 2002, 42, 278-290.	2.0	76
80	Integrating Function and Ecology in Studies of Adaptation: Investigations of Locomotor Capacity as a Model System. <i>Annual Review of Ecology, Evolution, and Systematics</i> , 2001, 32, 367-396.	6.7	394
81	Do Lizards Avoid Habitats in Which Performance Is Submaximal? The Relationship between Sprinting Capabilities and Structural Habitat Use in Caribbean Anoles. <i>American Naturalist</i> , 1999, 154, 293-305.	2.1	218
82	A Comparative Analysis of the Ecological Significance of Maximal Locomotor Performance in Caribbean <i>Anolis</i> Lizards. <i>Evolution; International Journal of Organic Evolution</i> , 1998, 52, 219.	2.3	101
83	A COMPARATIVE ANALYSIS OF THE ECOLOGICAL SIGNIFICANCE OF MAXIMAL LOCOMOTOR PERFORMANCE IN CARIBBEAN <i>ANOLIS</i> LIZARDS. <i>Evolution; International Journal of Organic Evolution</i> , 1998, 52, 219-226.	2.3	240
84	A COMPARISON OF EVOLUTIONARY RADIATIONS IN MAINLAND AND CARIBBEAN <i>ANOLIS</i> LIZARDS. <i>Ecology</i> , 1997, 78, 2191-2203.	3.2	165
85	A comparative analysis of clinging ability among pad-bearing lizards. <i>Biological Journal of the Linnean Society</i> , 1996, 59, 21-35.	1.6	325
86	A comparative analysis of clinging ability among pad-bearing lizards. <i>Biological Journal of the Linnean Society</i> , 1996, 59, 21-35.	1.6	26
87	ADAPTATION AND CONSTRAINT IN THE EVOLUTION OF SPECIALIZATION OF BAHAMIAN <i>ANOLIS</i> LIZARDS. <i>Evolution; International Journal of Organic Evolution</i> , 1994, 48, 1786-1798.	2.3	108
88	The contributions of evolutionary divergence and phenotypic plasticity to geographic variation in the western fence lizard, <i>Sceloporus occidentalis</i> . <i>Biological Journal of the Linnean Society</i> , 0, 99, 84-98.	1.6	20