

# George Lauder

## List of Publications by Year in descending order

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166  
papers

13,455  
citations

10956

71  
h-index

24915

109  
g-index

170  
all docs

170  
docs citations

170  
times ranked

5926  
citing authors

#	ARTICLE	IF	CITATIONS
1	Phototactic guidance of a tissue-engineered soft-robotic ray. <i>Science</i> , 2016, 353, 158-162.	6.0	534
2	Form and function: structural analysis in evolutionary morphology. <i>Paleobiology</i> , 1981, 7, 430-442.	1.3	382
3	The hydrodynamics of eel swimming. <i>Journal of Experimental Biology</i> , 2004, 207, 1825-1841.	0.8	356
4	Biomimetic shark skin: design, fabrication and hydrodynamic function. <i>Journal of Experimental Biology</i> , 2014, 217, 1656-1666.	0.8	340
5	Passive propulsion in vortex wakes. <i>Journal of Fluid Mechanics</i> , 2006, 549, 385.	1.4	308
6	Fish biorobotics: kinematics and hydrodynamics of self-propulsion. <i>Journal of Experimental Biology</i> , 2007, 210, 2767-2780.	0.8	289
7	Evolution of the feeding mechanism in primitive actinopterygian fishes: A functional anatomical analysis of <i>Polypterus</i> , <i>Lepisosteus</i> , and <i>Amia</i> . <i>Journal of Morphology</i> , 1980, 163, 283-317.	0.6	252
8	The hydrodynamic function of shark skin and two biomimetic applications. <i>Journal of Experimental Biology</i> , 2012, 215, 785-795.	0.8	236
9	Locomotor function of the dorsal fin in teleost fishes: experimental analysis of wake forces in sunfish. <i>Journal of Experimental Biology</i> , 2001, 204, 2943-2958.	0.8	214
10	Fish Locomotion: Recent Advances and New Directions. <i>Annual Review of Marine Science</i> , 2015, 7, 521-545.	5.1	201
11	Scaling the propulsive performance of heaving flexible panels. <i>Journal of Fluid Mechanics</i> , 2014, 738, 250-267.	1.4	193
12	Hydrodynamics of a biologically inspired tandem flapping foil configuration. <i>Theoretical and Computational Fluid Dynamics</i> , 2007, 21, 155-170.	0.9	186
13	Hydrodynamics of caudal fin locomotion by chub mackerel, <i>Scomber japonicus</i> (Scombridae). <i>Journal of Experimental Biology</i> , 2002, 205, 1709-1724.	0.8	184
14	Patterns of Evolution in the Feeding Mechanism of Actinopterygian Fishes. <i>American Zoologist</i> , 1982, 22, 275-285.	0.7	176
15	A robotic fish caudal fin: effects of stiffness and motor program on locomotor performance. <i>Journal of Experimental Biology</i> , 2012, 215, 56-67.	0.8	171
16	The Suction Feeding Mechanism in Sunfishes ( <i>Lepomis</i> ): An Experimental Analysis. <i>Journal of Experimental Biology</i> , 1980, 88, 49-72.	0.8	171
17	Tuna robotics: A high-frequency experimental platform exploring the performance space of swimming fishes. <i>Science Robotics</i> , 2019, 4, .	9.9	169
18	Multi-animal pose estimation, identification and tracking with DeepLabCut. <i>Nature Methods</i> , 2022, 19, 496-504.	9.0	165

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19	Dorsal and anal fin function in bluegill sunfish <i>Lepomis macrochirus</i> : three-dimensional kinematics during propulsion and maneuvering. <i>Journal of Experimental Biology</i> , 2005, 208, 2753-2763.	0.8	163
20	Dynamics of freely swimming flexible foils. <i>Physics of Fluids</i> , 2012, 24, .	1.6	162
21	Hydrodynamics of Undulatory Propulsion. <i>Fish Physiology</i> , 2005, 23, 425-468.	0.2	154
22	A novel mechanism for mechanosensory-based rheotaxis in larval zebrafish. <i>Nature</i> , 2017, 547, 445-448.	13.7	151
23	Hydrodynamics of the escape response in bluegill sunfish, <i>Lepomis macrochirus</i> . <i>Journal of Experimental Biology</i> , 2008, 211, 3359-3369.	0.8	144
24	Functional and morphological bases of trophic specialization in sunfishes (Teleostei, centrarchidae). <i>Journal of Morphology</i> , 1983, 178, 1-21.	0.6	136
25	How swimming fish use slow and fast muscle fibers: implications for models of vertebrate muscle recruitment. <i>Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology</i> , 1994, 175, 123-31.	0.7	136
26	Fish locomotion: kinematics and hydrodynamics of flexible foil-like fins. <i>Experiments in Fluids</i> , 2007, 43, 641-653.	1.1	133
27	Learning from fish: Kinematics and experimental hydrodynamics for roboticists. <i>International Journal of Automation and Computing</i> , 2006, 3, 325-335.	4.5	131
28	Computational analysis of vortex dynamics and performance enhancement due to body-fin and fin-fin interactions in fish-like locomotion. <i>Journal of Fluid Mechanics</i> , 2017, 829, 65-88.	1.4	130
29	The mechanics of active fin-shape control in ray-finned fishes. <i>Journal of the Royal Society Interface</i> , 2007, 4, 243-256.	1.5	129
30	Functional morphology of the feeding mechanism in aquatic ambystomatid salamanders. <i>Journal of Morphology</i> , 1985, 185, 297-326.	0.6	127
31	Maximizing the efficiency of a flexible propulsor using experimental optimization. <i>Journal of Fluid Mechanics</i> , 2015, 767, 430-448.	1.4	127
32	Computational modelling and analysis of the hydrodynamics of a highly deformable fish pectoral fin. <i>Journal of Fluid Mechanics</i> , 2010, 645, 345-373.	1.4	125
33	The effect of fin ray flexural rigidity on the propulsive forces generated by a biorobotic fish pectoral fin. <i>Journal of Experimental Biology</i> , 2010, 213, 4043-4054.	0.8	125
34	Speed Effects on Midline Kinematics During Steady Undulatory Swimming of Largemouth Bass, <i>Micropterus Salmoides</i> . <i>Journal of Experimental Biology</i> , 1995, 198, 585-602.	0.8	123
35	Locomotion with flexible propulsors: I. Experimental analysis of pectoral fin swimming in sunfish. <i>Bioinspiration and Biomimetics</i> , 2006, 1, S25-S34.	1.5	121
36	Morphology and function of the feeding apparatus of the lungfish, <i>Lepidosiren paradoxa</i> (Dipnoi). <i>Journal of Morphology</i> , 1986, 187, 81-108.	0.6	120

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37	Mechanical properties of a bio-inspired robotic knifefish with an undulatory propulsor. <i>Bioinspiration and Biomimetics</i> , 2011, 6, 026004.	1.5	120
38	Locomotor function of the dorsal fin in teleost fishes: experimental analysis of wake forces in sunfish. <i>Journal of Experimental Biology</i> , 2001, 204, 2943-58.	0.8	120
39	Locomotor function of the dorsal fin in rainbow trout: kinematic patterns and hydrodynamic forces. <i>Journal of Experimental Biology</i> , 2005, 208, 4479-4494.	0.8	115
40	Hydrodynamic function of dorsal and anal fins in brook trout ( <i>Salvelinus fontinalis</i> ). <i>Journal of Experimental Biology</i> , 2007, 210, 325-339.	0.8	114
41	Aquatic prey capture in ray-finned fishes: A century of progress and new directions. <i>Journal of Morphology</i> , 2001, 248, 99-119.	0.6	112
42	Passive mechanical models of fish caudal fins: effects of shape and stiffness on self-propulsion. <i>Bioinspiration and Biomimetics</i> , 2015, 10, 036002.	1.5	112
43	Shark skin-inspired designs that improve aerodynamic performance. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20170828.	1.5	112
44	Function of the Caudal Fin During Locomotion in Fishes: Kinematics, Flow Visualization, and Evolutionary Patterns. <i>American Zoologist</i> , 2000, 40, 101-122.	0.7	109
45	Robotic Models for Studying Undulatory Locomotion in Fishes. <i>Marine Technology Society Journal</i> , 2011, 45, 41-55.	0.3	103
46	Flexible propulsors in ground effect. <i>Bioinspiration and Biomimetics</i> , 2014, 9, 036008.	1.5	101
47	Caudal fin shape modulation and control during acceleration, braking and backing maneuvers in bluegill sunfish, <i>Lepomis macrochirus</i> . <i>Journal of Experimental Biology</i> , 2009, 212, 277-286.	0.8	100
48	Hydrodynamics of swimming in stingrays: numerical simulations and the role of the leading-edge vortex. <i>Journal of Fluid Mechanics</i> , 2016, 788, 407-443.	1.4	99
49	Hydrodynamics of the bluegill sunfish C-start escape response: three-dimensional simulations and comparison with experimental data. <i>Journal of Experimental Biology</i> , 2012, 215, 671-684.	0.8	97
50	Function of the heterocercal tail in sharks: quantitative wake dynamics during steady horizontal swimming and vertical maneuvering. <i>Journal of Experimental Biology</i> , 2002, 205, 2365-2374.	0.8	97
51	Prey capture by <i>Luciocephalus pulcher</i> : implications for models of jaw protrusion in teleost fishes. <i>Environmental Biology of Fishes</i> , 1981, 6, 257-268.	0.4	96
52	An autonomously swimming biohybrid fish designed with human cardiac biophysics. <i>Science</i> , 2022, 375, 639-647.	6.0	95
53	Hydrodynamics of caudal fin locomotion by chub mackerel, <i>Scomber japonicus</i> (Scombridae). <i>Journal of Experimental Biology</i> , 2002, 205, 1709-24.	0.8	94
54	Prey Capture Hydrodynamics in Fishes: Experimental Tests of Two Models. <i>Journal of Experimental Biology</i> , 1983, 104, 1-13.	0.8	91

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55	Bioinspiration from fish for smart material design and function. <i>Smart Materials and Structures</i> , 2011, 20, 094014.	1.8	89
56	Robotics-inspired biology. <i>Journal of Experimental Biology</i> , 2018, 221, .	0.8	88
57	A hydrodynamic analysis of fish swimming speed: wake structure and locomotor force in slow and fast labriform swimmers. <i>Journal of Experimental Biology</i> , 2000, 203, 2379-93.	0.8	87
58	Caudal Fin Locomotion in Ray-finned Fishes: Historical and Functional Analyses. <i>American Zoologist</i> , 1989, 29, 85-102.	0.7	86
59	Functional morphology of the pectoral fins in bamboo sharks, <i>Chiloscyllium plagiosum</i> : Benthic vs. Pelagic station-holding. <i>Journal of Morphology</i> , 2001, 249, 195-209.	0.6	86
60	Hydrodynamic function of the shark's tail. <i>Nature</i> , 2004, 430, 850-850.	13.7	86
61	Escaping Flatland: three-dimensional kinematics and hydrodynamics of median fins in fishes. <i>Journal of Experimental Biology</i> , 2008, 211, 187-195.	0.8	85
62	Effects of non-uniform stiffness on the swimming performance of a passively-flexing, fish-like foil model. <i>Bioinspiration and Biomimetics</i> , 2015, 10, 056019.	1.5	82
63	Undulatory Swimming Performance and Body Stiffness Modulation in a Soft Robotic Fish-Inspired Physical Model. <i>Soft Robotics</i> , 2017, 4, 202-210.	4.6	82
64	Passive Robotic Models of Propulsion by the Bodies and Caudal Fins of Fish. <i>Integrative and Comparative Biology</i> , 2012, 52, 576-587.	0.9	81
65	Forces, Fishes, and Fluids: Hydrodynamic Mechanisms of Aquatic Locomotion. <i>Physiology</i> , 2002, 17, 235-240.	1.6	77
66	Undulatory locomotion of flexible foils as biomimetic models for understanding fish propulsion. <i>Journal of Experimental Biology</i> , 2014, 217, 2110-20.	0.8	77
67	Functional design of the feeding mechanism in lower vertebrates: unidirectional and bidirectional flow systems in the tiger salamander. <i>Zoological Journal of the Linnean Society</i> , 1986, 88, 277-290.	1.0	76
68	Hydrodynamics of median-fin interactions in fish-like locomotion: Effects of fin shape and movement. <i>Physics of Fluids</i> , 2020, 32, .	1.6	75
69	Function of the dorsal fin in bluegill sunfish: Motor patterns during four distinct locomotor behaviors. , 1996, 228, 307-326.		74
70	The C-start escape response of <i>Polypterus senegalus</i> : bilateral muscle activity and variation during stage 1 and 2. <i>Journal of Experimental Biology</i> , 2002, 205, 2591-2603.	0.8	74
71	Low-dimensional models and performance scaling of a highly deformable fish pectoral fin. <i>Journal of Fluid Mechanics</i> , 2009, 631, 311-342.	1.4	73
72	Structure, biomimetics, and fluid dynamics of fish skin surfaces. <i>Physical Review Fluids</i> , 2016, 1, .	1.0	73

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73	On the rules for aquatic locomotion. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	73
74	Speed-dependent intrinsic caudal fin muscle recruitment during steady swimming in bluegill sunfish, <i>Lepomis macrochirus</i> . <i>Journal of Experimental Biology</i> , 2008, 211, 587-598.	0.8	71
75	Tunabot Flex: a tuna-inspired robot with body flexibility improves high-performance swimming. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 026019.	1.5	71
76	Hydrodynamic function of biomimetic shark skin: effect of denticle pattern and spacing. <i>Bioinspiration and Biomimetics</i> , 2015, 10, 066010.	1.5	68
77	Experimental Hydrodynamics and Evolution: Function of Median Fins in Ray-finned Fishes. <i>Integrative and Comparative Biology</i> , 2002, 42, 1009-1017.	0.9	67
78	Ontogeny of form and function: Locomotor morphology and drag in zebrafish ( <i>Danio rerio</i> ). <i>Journal of Morphology</i> , 2006, 267, 1099-1109.	0.6	66
79	Quantification of the wake of rainbow trout ( <i>Oncorhynchus mykiss</i> ) using three-dimensional stereoscopic digital particle image velocimetry. <i>Journal of Experimental Biology</i> , 2002, 205, 3271-3279.	0.8	66
80	Volumetric imaging of shark tail hydrodynamics reveals a three-dimensional dual-ring vortex wake structure. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2011, 278, 3670-3678.	1.2	61
81	Three-dimensional kinematics and wake structure of the pectoral fins during locomotion in leopard sharks <i>Triakis semifasciata</i> . <i>Journal of Experimental Biology</i> , 2000, 203, 2261-78.	0.8	61
82	Function of the heterocercal tail in sharks: quantitative wake dynamics during steady horizontal swimming and vertical maneuvering. <i>Journal of Experimental Biology</i> , 2002, 205, 2365-74.	0.8	60
83	Locomotion in scombrid fishes: visualization of flow around the caudal peduncle and finlets of the chub mackerel <i>Scomber japonicus</i> . <i>Journal of Experimental Biology</i> , 2001, 204, 2251-2263.	0.8	58
84	Rajiform locomotion: three-dimensional kinematics of the pectoral fin surface during swimming by freshwater stingray <i>Potamotrygon orbignyi</i> . <i>Journal of Experimental Biology</i> , 2012, 215, 3231-41.	0.8	57
85	Control surfaces of aquatic vertebrates: active and passive design and function. <i>Journal of Experimental Biology</i> , 2017, 220, 4351-4363.	0.8	57
86	Understanding Fish Linear Acceleration Using an Undulatory Biorobotic Model with Soft Fluidic Elastomer Actuated Morphing Median Fins. <i>Soft Robotics</i> , 2018, 5, 375-388.	4.6	57
87	Tail-propelled aquatic locomotion in a theropod dinosaur. <i>Nature</i> , 2020, 581, 67-70.	13.7	57
88	Water Flow Patterns During Prey Capture By Teleost Fishes. <i>Journal of Experimental Biology</i> , 1984, 113, 143-150.	0.8	56
89	Accelerating fishes increase propulsive efficiency by modulating vortex ring geometry. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 13828-13833.	3.3	55
90	Hydrodynamic properties of biomimetic shark skin: effect of denticle size and swimming speed. <i>Bioinspiration and Biomimetics</i> , 2018, 13, 056014.	1.5	55

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91	Swimming hydrodynamics: ten questions and the technical approaches needed to resolve them. <i>Experiments in Fluids</i> , 2011, 51, 23-35.	1.1	54
92	Understanding undulatory locomotion in fishes using an inertia-compensated flapping foil robotic device. <i>Bioinspiration and Biomimetics</i> , 2013, 8, 046013.	1.5	54
93	Muscle Recruitment During Terrestrial Locomotion: How Speed and Temperature Affect Fibre Type Use in a Lizard. <i>Journal of Experimental Biology</i> , 1990, 152, 101-128.	0.8	54
94	Diversity of dermal denticle structure in sharks: Skin surface roughness and three-dimensional morphology. <i>Journal of Morphology</i> , 2018, 279, 1132-1154.	0.6	53
95	Functional morphology of the fin rays of teleost fishes. <i>Journal of Morphology</i> , 2013, 274, 1044-1059.	0.6	49
96	Center of mass motion in swimming fish: effects of speed and locomotor mode during undulatory propulsion. <i>Zoology</i> , 2014, 117, 269-281.	0.6	49
97	High postural costs and anaerobic metabolism during swimming support the hypothesis of a U-shaped metabolism speed curve in fishes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 13048-13053.	3.3	49
98	Tuna locomotion: a computational hydrodynamic analysis of finlet function. <i>Journal of the Royal Society Interface</i> , 2020, 17, 20190590.	1.5	48
99	Terrestrial feeding in the Mudskipper <i>Periophthalmus</i> (Pisces: Teleostei): A cineradiographic analysis. <i>Journal of Zoology</i> , 2009, 193, 517-530.	0.8	47
100	Biomechanics of Locomotion in Sharks, Rays, and Chimeras. <i>Marine Biology</i> , 2004, , 139-164.	0.1	47
101	Asymmetrical Muscle Activity During Feeding in the Gar, <i>Lepisosteus Oculatus</i> . <i>Journal of Experimental Biology</i> , 1980, 84, 17-32.	0.8	47
102	Functional Anatomy of Feeding in the Bluegill Sunfish, <i>Lepomis Macrochirus</i> : <i>In Vivo</i> Measurement of Bone Strain. <i>Journal of Experimental Biology</i> , 1980, 84, 33-55.	0.8	47
103	Fish optimize sensing and respiration during undulatory swimming. <i>Nature Communications</i> , 2016, 7, 11044.	5.8	45
104	The ontogeny of fin function during routine turns in zebrafish <i>Danio rerio</i> . <i>Journal of Experimental Biology</i> , 2007, 210, 3374-3386.	0.8	43
105	Hydrodynamics of C-Start Escape Responses of Fish as Studied with Simple Physical Models. <i>Integrative and Comparative Biology</i> , 2015, 55, 728-739.	0.9	43
106	Fish-like aquatic propulsion studied using a pneumatically-actuated soft-robotic model. <i>Bioinspiration and Biomimetics</i> , 2020, 15, 046008.	1.5	43
107	Batoid locomotion: effects of speed on pectoral fin deformation in the little skate, <i>Leucoraja erinacea</i> . <i>Journal of Experimental Biology</i> , 2017, 220, 705-712.	0.8	42
108	Use of Biorobotic Models of Highly Deformable Fins for Studying the Mechanics and Control of Fin Forces in Fishes. <i>Integrative and Comparative Biology</i> , 2011, 51, 176-189.	0.9	41

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109	Three-dimensional analysis of scale morphology in bluegill sunfish, <i>Lepomis macrochirus</i> . <i>Zoology</i> , 2016, 119, 182-195.	0.6	41
110	Airfoil-like mechanics generate thrust on the anterior body of swimming fishes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 10585-10592.	3.3	40
111	Functional morphology of the 'tongue-bite' in the osteoglossomorph fish <i>Notopterus</i> . <i>Journal of Morphology</i> , 1989, 202, 379-408.	0.6	39
112	Locomotion of free-swimming ghost knifefish: anal fin kinematics during four behaviors. <i>Zoology</i> , 2014, 117, 337-348.	0.6	38
113	Convergence of undulatory swimming kinematics across a diversity of fishes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	38
114	Advances in Comparative Physiology from High-Speed Imaging of Animal and Fluid Motion. <i>Annual Review of Physiology</i> , 2008, 70, 143-163.	5.6	36
115	Passing the Wake: Using Multiple Fins to Shape Forces for Swimming. <i>Biomimetics</i> , 2019, 4, 23.	1.5	36
116	A pressure-based force and torque prediction technique for the study of fish-like swimming. <i>PLoS ONE</i> , 2017, 12, e0189225.	1.1	36
117	Speciation through the lens of biomechanics: locomotion, prey capture and reproductive isolation. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2016, 283, 20161294.	1.2	35
118	Challenging zebrafish escape responses by increasing water viscosity. <i>Journal of Experimental Biology</i> , 2012, 215, 1854-1862.	0.8	34
119	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.	0.6	34
120	Fish-like three-dimensional swimming with an autonomous, multi-fin, and biomimetic robot. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 026018.	1.5	33
121	Fish Locomotion: Biology and Robotics of Body and Fin-Based Movements. <i>Springer Tracts in Mechanical Engineering</i> , 2015, , 25-49.	0.1	30
122	Swimming Mechanics and Energetics of Elasmobranch Fishes. <i>Fish Physiology</i> , 2015, , 219-253.	0.2	29
123	Tunas as a high-performance fish platform for inspiring the next generation of autonomous underwater vehicles. <i>Bioinspiration and Biomimetics</i> , 2020, 15, 035007.	1.5	29
124	Hydrodynamic advantages of in-line schooling. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 046002.	1.5	29
125	Locomotion in scombrid fishes: visualization of flow around the caudal peduncle and finlets of the chub mackerel <i>Scomber japonicus</i> . <i>Journal of Experimental Biology</i> , 2001, 204, 2251-63.	0.8	29
126	Functional regionalization of the pectoral fin of the benthic longhorn sculpin during station holding and swimming. <i>Journal of Zoology</i> , 2008, 276, 159-167.	0.8	28



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127	Structure and function in the tail of the Pumpkinseed sunfish ( <i>Lepomis gibbosus</i> ). <i>Journal of Zoology</i> , 1982, 197, 483-495.	0.8	27
128	Modeling red muscle power output during steady and unsteady swimming in largemouth bass. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1994, 267, R481-R488.	0.9	26
129	Median fin function during the escape response of bluegill sunfish ( <i>Lepomis macrochirus</i> ). I: Fin-ray orientation and movement. <i>Journal of Experimental Biology</i> , 2012, 215, 2869-2880.	0.8	26
130	Imaging biological surface topography <i>in situ</i> and <i>in vivo</i> . <i>Methods in Ecology and Evolution</i> , 2017, 8, 1626-1638.	2.2	26
131	Pressure and Water Flow Patterns in the Respiratory Tract of the Bass ( <i>Micropterus</i> )	0.8	26
132	Prey transport in the tiger salamander: Quantitative electromyography and muscle function in tetrapods. <i>The Journal of Experimental Zoology</i> , 1991, 260, 1-17.	1.4	25
133	Comparative morphology of the myomeres and axial skeleton in four genera of centrarchid fishes. <i>Journal of Morphology</i> , 1994, 220, 185-205.	0.6	25
134	Median fin function during the escape response of bluegill sunfish ( <i>Lepomis macrochirus</i> ). II: Fin-ray curvature. <i>Journal of Experimental Biology</i> , 2012, 215, 2881-2890.	0.8	25
135	Tunable stiffness in fish robotics: mechanisms and advantages. <i>Bioinspiration and Biomimetics</i> , 2022, 17, 011002.	1.5	25
136	How smooth is a dolphin? The ridged skin of odontocetes. <i>Biology Letters</i> , 2019, 15, 20190103.	1.0	24
137	A Biologically Derived Pectoral Fin for Yaw Turn Manoeuvres. <i>Applied Bionics and Biomechanics</i> , 2010, 7, 41-55.	0.5	23
138	Performance variation due to stiffness in a tuna-inspired flexible foil model. <i>Bioinspiration and Biomimetics</i> , 2017, 12, 016011.	1.5	19
139	How zebrafish turn: analysis of pressure force dynamics and mechanical work. <i>Journal of Experimental Biology</i> , 2020, 223, .	0.8	19
140	Fin-fin interactions during locomotion in a simplified biomimetic fish model. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 046023.	1.5	17
141	Hydrodynamic function of dorsal fins in spiny dogfish and bamboo sharks during steady swimming. <i>Journal of Experimental Biology</i> , 2017, 220, 3967-3975.	0.8	16
142	Effect of input perturbation on the performance and wake dynamics of aquatic propulsion in heaving flexible foils. <i>Physical Review Fluids</i> , 2017, 2, .	1.0	16
143	Dermal Denticle Diversity in Sharks: Novel Patterns on the Interbranchial Skin. <i>Integrative Organismal Biology</i> , 2021, 3, obab034.	0.9	15
144	The denticle surface of thresher shark tails: Three-dimensional structure and comparison to other pelagic species. <i>Journal of Morphology</i> , 2020, 281, 938-955.	0.6	14

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145	Locomotion in scombrid fishes: morphology and kinematics of the finlets of the chub mackerel <i>Scomber japonicus</i> . <i>Journal of Experimental Biology</i> , 2000, 203, 2247-59.	0.8	14
146	Flight of the robofly. <i>Nature</i> , 2001, 412, 688-689.	13.7	13
147	Tuna robotics: hydrodynamics of rapid linear accelerations. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2021, 288, 20202726.	1.2	13
148	The Role of the Tail or Lack Thereof in the Evolution of Tetrapod Aquatic Propulsion. <i>Integrative and Comparative Biology</i> , 2021, 61, 398-413.	0.9	12
149	Functional morphology and hydrodynamics of backward swimming in bluegill sunfish, <i>Lepomis macrochirus</i> . <i>Zoology</i> , 2016, 119, 414-420.	0.6	11
150	Scale diversity in bigeye tuna ( <i>Thunnus obesus</i> ): Fat-filled trabecular scales made of cellular bone. <i>Journal of Morphology</i> , 2018, 279, 828-840.	0.6	9
151	Experimental morphology of the feeding mechanism in salamanders. <i>Journal of Morphology</i> , 1991, 210, 33-44.	0.6	8
152	Mechanisms of anguilliform locomotion in fishes studied using simple three-dimensional physical models. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 046006.	1.5	8
153	A biorobotic model of the suction feeding system in largemouth bass: the roles of motor program speed and hyoid kinematics. <i>Journal of Experimental Biology</i> , 2016, 219, 2048-59.	0.8	8
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