

# Henry C Astley

## List of Publications by Year in descending order

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Version: 2024-02-01

29  
papers

1,039  
citations

623734

14  
h-index

552781

26  
g-index

31  
all docs

31  
docs citations

31  
times ranked

898  
citing authors

#	ARTICLE	IF	CITATIONS
1	Slithering across worldsâ€™snake-inspired robots for extraterrestrial exploration. , 2022, , 261-289.		1
2	Snakes combine vertical and lateral bending to traverse uneven terrain. <i>Bioinspiration and Biomimetics</i> , 2022, 17, 036009.	2.9	5
3	Defibrillate You Later, Alligator: Q10 Scaling and Refractoriness Keeps Alligators from Fibrillation. <i>Integrative Organismal Biology</i> , 2021, 3, obaa047.	1.8	5
4	Comparing the turn performance of different motor control schemes in multilink fish-inspired robots. <i>Bioinspiration and Biomimetics</i> , 2021, 16, 036010.	2.9	3
5	Generation of propulsive force via vertical undulations in snakes. <i>Journal of Experimental Biology</i> , 2021, 224, .	1.7	9
6	Testing the effects of body depth on fish maneuverability via robophysical models. <i>Bioinspiration and Biomimetics</i> , 2021, 17, .	2.9	3
7	Long Limbless Locomotors Over Land: The Mechanics and Biology of Elongate, Limbless Vertebrate Locomotion. <i>Integrative and Comparative Biology</i> , 2020, 60, 134-139.	2.0	8
8	The control of routine fish maneuvers: Connecting midline kinematics to turn outcomes. <i>Journal of Experimental Zoology Part A: Ecological and Integrative Physiology</i> , 2020, 333, 579-594.	1.9	4
9	Experimental modification of morphology reveals the effects of the zygosphenes-zygantrum joint on the range of motion of snake vertebrae. <i>Journal of Experimental Biology</i> , 2020, 223, .	1.7	15
10	Surprising simplicities and syntheses in limbless self-propulsion in sand. <i>Journal of Experimental Biology</i> , 2020, 223, .	1.7	29
11	The Biomechanics of Multi-articular Muscleâ€™Tendon Systems in Snakes. <i>Integrative and Comparative Biology</i> , 2020, 60, 140-155.	2.0	12
12	Side-impact collision: mechanics of obstacle negotiation in sidewinding snakes. <i>Bioinspiration and Biomimetics</i> , 2020, 15, 065005.	2.9	12
13	Mitigating memory effects during undulatory locomotion on hysteretic materials. <i>ELife</i> , 2020, 9, .	6.0	23
14	Comparative and functional analysis of the digital mucus glands and secretions of tree frogs. <i>Frontiers in Zoology</i> , 2019, 16, 19.	2.0	15
15	Traversing Tight Tunnelsâ€™Implementing an Adaptive Concertina Gait in a Biomimetic Snake Robot. , 2018, , .		4
16	Morphological and kinematic specializations of walking frogs. <i>Journal of Experimental Zoology Part A: Ecological and Integrative Physiology</i> , 2018, 329, 87-98.	1.9	16
17	Tail use improves performance on soft substrates in models of early vertebrate land locomotors. <i>Science</i> , 2016, 353, 154-158.	12.6	78
18	The diversity and evolution of locomotor muscle properties in anurans. <i>Journal of Experimental Biology</i> , 2016, 219, 3163-3173.	1.7	32

#	ARTICLE	IF	CITATIONS
19	Fluoromicrometry: A Method for Measuring Muscle Length Dynamics with Biplanar Videofluoroscopy. <i>Journal of Experimental Zoology</i> , 2016, 325, 399-408.	1.2	37
20	Kinematic gait synthesis for snake robots. <i>International Journal of Robotics Research</i> , 2016, 35, 100-113.	8.5	45
21	Robot-inspired biology: The compound-wave control template. , 2015, , .		7
22	Robust jumping performance and elastic energy recovery from compliant perches in tree frogs. <i>Journal of Experimental Biology</i> , 2015, 218, 3360-3363.	1.7	32
23	Modulation of orthogonal body waves enables high maneuverability in sidewinding locomotion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 6200-6205.	7.1	78
24	The mechanics of elastic loading and recoil in anuran jumping. <i>Journal of Experimental Biology</i> , 2014, 217, 4372-4378.	1.7	82
25	Sidewinding with minimal slip: Snake and robot ascent of sandy slopes. <i>Science</i> , 2014, 346, 224-229.	12.6	209
26	Getting around when youâ€™re round: quantitative analysis of the locomotion of the blunt-spined brittle star, <i>Ophiocoma echinata</i> . <i>Journal of Experimental Biology</i> , 2012, 215, 1923-1929.	1.7	51
27	Evidence for a vertebrate catapult: elastic energy storage in the plantaris tendon during frog jumping. <i>Biology Letters</i> , 2012, 8, 386-389.	2.3	131
28	Arboreal habitat structure affects the performance and modes of locomotion of corn snakes ( <i>Elaphe guttata</i> ). <i>Journal of Experimental Zoology</i> , 2009, 311A, 207-216.	1.2	30
29	Effects of perch diameter and incline on the kinematics, performance and modes of arboreal locomotion of corn snakes ( <i>Elaphe guttata</i> ). <i>Journal of Experimental Biology</i> , 2007, 210, 3862-3872.	1.7	61